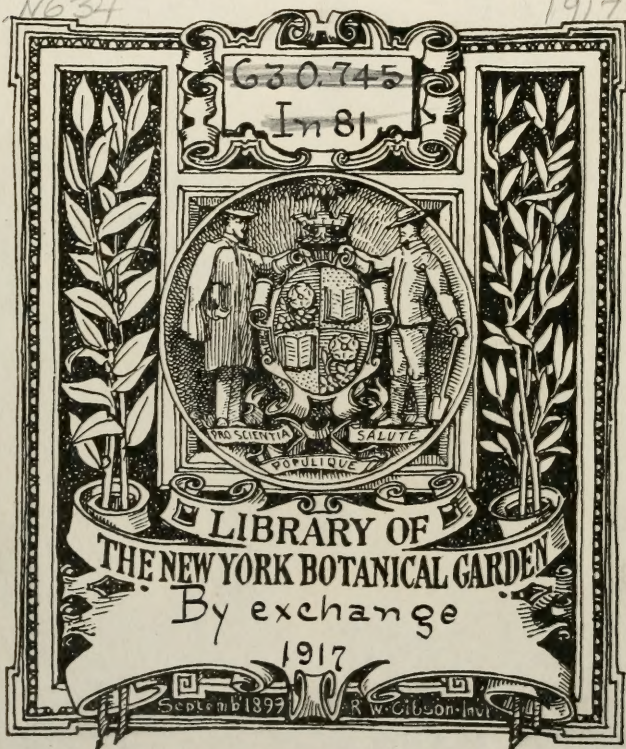


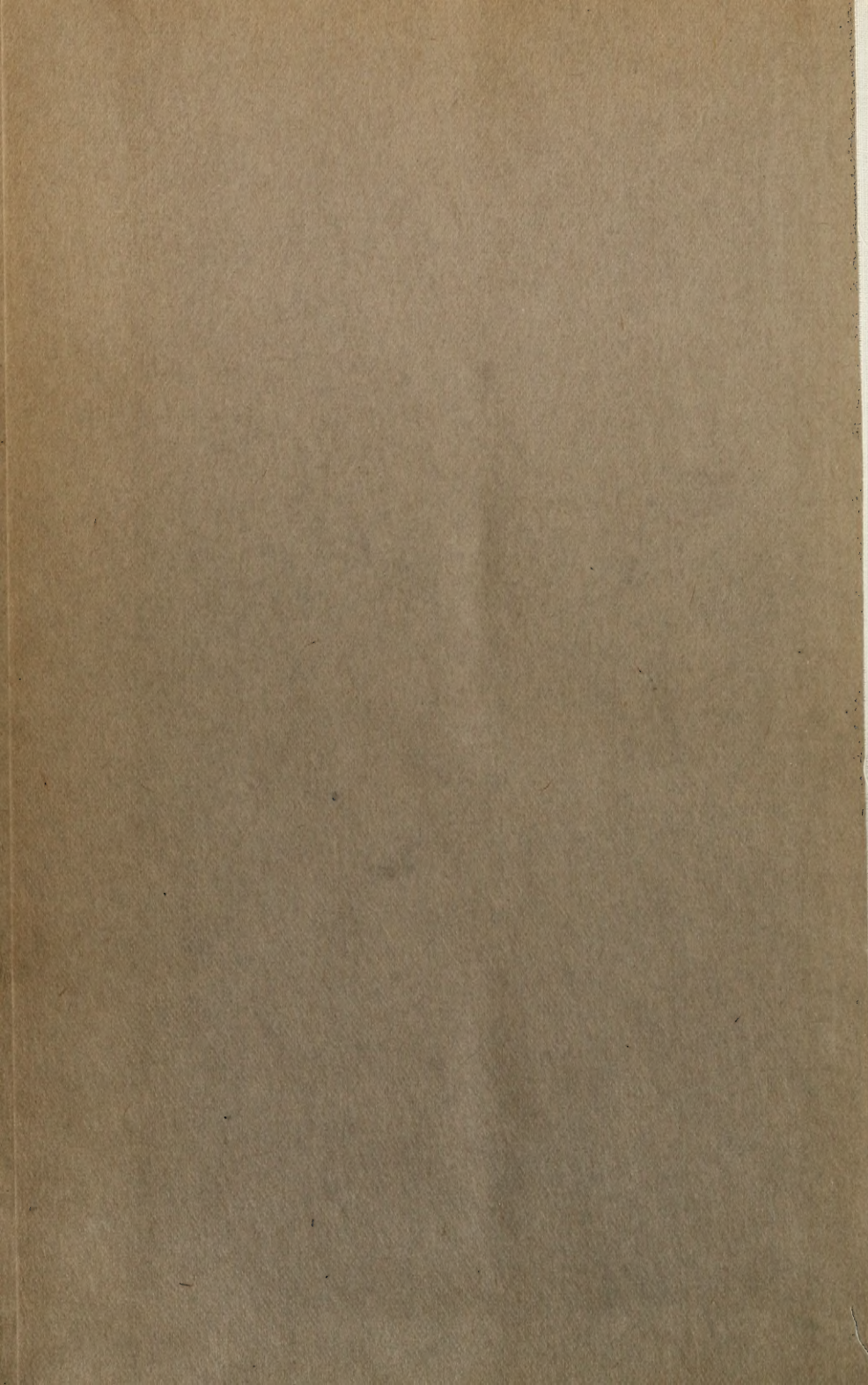
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INTERNATIONAL INSTITUTE OF AGRICULTURE
BUREAU OF ECONOMIC AND SOCIAL INTELLIGENCE

INTERNATIONAL REVIEW
OF AGRICULTURAL ECONOMICS

(MONTHLY BULLETIN OF ECONOMIC
AND SOCIAL INTELLIGENCE)

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8TH YEAR: NUMBER 7

JULY, 1917.



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Part I: Co-operation and Association

BULGARIA.

THE CENTRAL CO-OPERATIVE BANK OF BULGARIA.

SOURCE:

Отчетъ на българската централна кооперативна Банка за 1914 година. (*Report of the Central Co-operative Bank of Bulgaria for 1914*). Sophia 1915.

This bank was formed by the law of 17 December 1910 (old style) and became active on 18 March 1911. Its offices are at Sophia ; the branches of the National Bank and the Agricultural Bank serve as its representatives and correspondents in other parts of the country.

The Central Co-operative Bank of Bulgaria has the three following objects :

- 1) It is the clearing-house of the co-operative associations, that is to say that such of them as dispose temporarily of abundant funds place these in the Central Bank which uses them for the purpose of affording credit to the co-operative associations which lack means.

- 2) It grants long and short-term credit out of its own capital to co-operative associations.

- 3) It inspects co-operative associations.

Its objects show that it is intended to discharge in relation to the co-operative societies functions previously exercised by the National Bank or the Agricultural Bank ; but since the by-laws of the two latter have not changed, all three banks at present exercise the same functions, although it is hoped that in the future those of the Central Co-operative Bank will be separated from those of the other two.

In addition to these functions the Central Bank is charged on commission to perform certain services on behalf of the Institute of Insurance, namely to receive premiums and pay insurance sums.

According to the law (article 8, pages 9 and 10) the Central Co-operative Bank is authorized to keep general stores and organize public sales and purchases on behalf of its members, but hitherto it has not availed itself of this right.

The members of the Central Co-operative Bank are of two kinds :

a) the National Bank and the Agricultural Bank are by the law (article 3) obliged to pay a total contribution of 5,000,000 francs (2,500,000 each) and are designated founder members ;

b) the co-operative societies and their federations are authorized to have themselves registered as ordinary members, so long, of course, as they pay the subscriptions prescribed by the law.

The co-operative societies are *direct* ordinary members if they register without the intervention of the district federations, *indirect* ordinary members if it is the federation to which they are affiliated which is registered. Co-operative societies belonging to a federation registered as an ordinary member, and therefore themselves indirect ordinary members, may not also be registered as direct ordinary members.

Ordinary members are obliged to pay subscriptions. If they are themselves ordinary members co-operative societies are obliged to subscribe for at least two shares of 100 francs each, while a district federation is obliged to subscribe for at least one share for each co-operative society affiliated to itself.

Besides its own capital the Central Co-operative Bank uses capital which it procures 1) by receiving deposits, 2) by rediscounting its paper, and 3) by issuing long-term bonds redeemable on drawing lots. The issues of bonds have to be covered not only by the bank's credit but also in the proportion of 10 per cent. by the bonds fund.

The bonds fund was formed by the founder members and is fixed by the law at one million francs.

The Central Co-operative Bank is superintended by the Ministry of Finances.

At the end of 1914 the Central Co-operative Bank had in addition to its founder members, who are the National Bank and the Agricultural Bank, 644 ordinary members, namely :

575	rural funds ;	
27	popular banks	
24	co-operative producers'	societies
12	" consumers'	"
3	" limited liability credit	"
2	" purchase and sale	"
1	" stock-farming	"

644

A comparison with the figures of the preceding year shows that the membership had increased by ninety-five.

The business of the Central Bank from its foundation until the end of 1914 is shown by the following tables :

TABLE I. — *Assets.*

	1911	1912	1913	1914
	fr.	fr.	fr.	fr.
1) Current accounts on 5-year bonds	—	2,203,910.67	4,531,316.52	8,857,434.29
2) Bills	1,656,729.57	4,408,764.01	3,474,102.62	2,778,789.85
3) Current accounts bearing interest.	509,190.88	706,822.43	2,469,687.98	1,799,776.19
4) Currents accounts without interest (1)	3,321,138.65	355,337.02	224,115.88	171,126.56
5) Current accounts opened on deposit of State securities . . .	—	—	6,626.35	14,923.87
6) Paper	176,420.01	315,009.85	82,325.15	14,917.33
7) Loans on pledged agricultural products and machines . . .	—	—	50,000.00	70,233.05
8) Long-term loans,	179,350.00	111,435.85	59,128.85	3,273.85
9) Securities guaranteeing issues of bonds	529,000.00	529,000.00	552,500.00	552,500.00
10) Deposits to be received	—	—	—	905,964.12
11) Bills to be received by correspondents.	115,481.75	1,752,447.25	2,758,291.09	446,029.90
12) Bills on deposit	3,198,894.38	5,191,865.69	2,575,130.71	3,264,275.85
13) Payments not yet made by ordinary members (capital not called up).	62,343.10	56,992.10	33,299.43	11,797.50

(1) Unpaid-up capital of founder members.

TABLE II. — *Liabilities.*

	1911	1912	1913	1914
	fr.	fr.	fr.	fr.
1) Capital of the founder members .	5,000,000.00	5,000,000.00	5,000,000.00	5,000,000.00
2) Capital of the ordinary members .	88,600.00	111,700.00	114,800.00	129,000.00
3) Reserve fund.	—	—	10,448.50	56,948.05
4) Bonds fund	1,000,000.00	1,000,000.00	1,010,448.50	1,056,948.05
5) Term deposits:				
a) capitalized interest	73,794.00	1,761,110.55	2,453,561.26	2,711,637.60
b) non-capitalized interest . . .	31,232.00	35,848.35	1,059,563.63	1,065,538.55
6) Deposits at sight.	502,445.66	1,193,704.55	2,128,849.68	4,659,512.29
7) Deposits of bills	3,290,217.03	6,805,329.94	5,258,453.00	4,603,455.37

TABLE III. — *Receipts and Expenditure.*

	1911	1912	1913	1914
	fr.	fr.	fr.	fr.
EXPENDITURE.				
<i>I. — Section of credit.</i>				
1) Salaries of employees.	82,995.05	109,485.64	95,254.36	149,591.48
2) Compensation to members of the administrative and super- intending council	280.00	260.00	1,800.00	3,113.80
3) Dividends to members	2,542.42	13,462.51	7,521.66	27,815.35
4) Interest on deposits	15,551.62	68,420.59	131,655.98	344,047.35
5) Redemptions.	—	103,527.91	17,325.28	21,351.49
6) Other expenditure	23,657.56	31,574.81	101,894.63	49,627.39
<i>II. — Section of insurance.</i>				
1) Salaries of employees.	22,888.01	41,571.79	56,204.99	105,873.25
2) Other expenses.	16,094.12	13,675.64	13,862.37	26,170.83
RECEIPTS.				
1) Interest on current accounts. .	27,028.51	354,810.74	461,835.84	708,083.46
2) Discount of bills and bonds at 5 years	6,081.32	27,729.95	25,880.19	10,538.37
3) Interest on long term loans. .	6,680.17	9,015.54	5,949.34	—
4) Income from securities (1) . .	26,582.15	26,582.05	27,763.13	74,055.33
5) Commissions received by the institute of insurance.	12,240.95	64,217.84	78,730.14	95,782.21
6) Various receipts	353.80	9,207.80	1,647.89	57,840.33
(1) Coupons received..				

As compared with the business of the preceding years that of 1914 shows a marked difference in the point of the current accounts opened on five-year bonds. This item increased during the second half of 1914. The bank's debtors, who usually pay their debts in autumn, after the harvest, did not pay them in this year owing to the financial position brought about by the European war.

*
* *

At much the same time as the law regarding the foundation of the Central Bank another was passed as to the insurance of agricultural products

and cattle (26 December 1910). By this law there was created a State institute of insurance of which the financial management, namely the reception of premiums and payment of insurances, was by article 19 entrusted to the Central Bank, which formed for such purpose a special section called the insurance section.

Previously to this law, in the years from 1896 to 1903, the insurance of agricultural products was effected by the State itself in accordance with the law of 20 December 1895. This insurance was compulsory in the case of all lands excepts prairies, forests and tobacco plantations. The owners of the lands subject to insurance were obliged to pay, as insurance premiums, a tax equal to 5 per cent. of the land tax. On lands exempted from the land tax a special and equivalent tax was paid. The fund formed by the insured was increased by State grants at the rate of 500,000 francs a year.

If the premiums paid by the insured and the State grants did not suffice to compensate for all damages caused by hail the amount of the indemnities was reduced.

The working of this institute did not give satisfactory results. The losses due to hail in the years from 1896 to 1903 were valued at 40,275,500 francs while the premiums paid by landowners amounted only to 7,560,370 francs and the State grants to 4,000,000 francs.

The indemnities to be paid were therefore reduced by 75 per cent. and the insured received only 10,636,275 francs instead of 40,275,500 francs.

The law of 1895 was repealed in 1904; and on 26 December 1910, after long study, the new law was passed as to the insurance of agricultural products against hail and the insurance of cattle.

The principles of this law as regards insurance against hail are the following:

The insurer is the State itself. The insurance is optional, every farmer having the right either to insure or not. The fund needed for the payment of indemnities is made up of premiums paid by the insured and State grants. The State pays into this fund once for all 1,000,000 francs as a foundation capital, and also 500,000 francs a year (article 12). The premiums to be paid by the insured are fixed by a special commission composed of State employees and of the insured. They vary with crops, the position of lands, yield, risks, etc. The year begins on 1 March and ends on 28 or 29 February. Premiums may be paid up to the end of September.

Premiums are fixed: when once they have been established at the beginning of the year they cannot be increased or diminished. If the total amount of the premiums and the State's annual grant exceeds that of the losses caused by hail the excess is appropriated to the reserve fund. If on the other hand this amount is insufficient to compensate the insured to the extent of at least 80 per cent. of their losses the needed sum is taken from the reserve fund, until this has been reduced by 50 per cent., when any further sum required is obtained as credit from the Agricultural Bank (article 13). Such calls may not however be made upon the Agricultural Bank if a debt previously contracted has not been extinguished. In point of fact

the institute of insurance has hitherto had sufficient means of its own and has not therefore exercised this right.

The insurance of cattle is quite different. It follows the principle of mutuality. Insurance societies have been formed in the villages, and the State merely acts as reinsurer (article 2).

The insured pay their premiums to their society which pays one per cent. of the sum insured to the State as a reinsurance premium. The insurance fund is increased by the grants made by the State, namely 500,000 francs once for all and 100,000 francs a year.

The insurance year begins on 1 November and ends on 31 October (article 16).

The insured are compensated for their losses half by the State and half by their respective societies, but the half due from the societies is advanced to the insured by the State.

If the compensation falling to be paid by the State surpass the amount of the reinsurance premiums and the annual grant, the insurance societies are obliged to pay a supplementary reinsurance premium to the State (article 8). Such payment is made by the method of distribution.

The Central Bank is responsible for the financial management of this system of insurance: it receives the reinsurance premiums and the State grants and pays the estimated amount of losses to the insured, taking commission of from 3 to 10 per cent.

The insurance business from 1911 to the end of 1914 is shown by the following table:

TABLE IV. — *Insurance against Hail.*

Year	Total number of the insured	Insured value	Premiums paid	Number of cases of loss	Estimate of losses	Indemnities paid
		fr	fr		fr	fr
1911.	3,444	6,120,490	134,864.90	517	126,974.10	126,974.10
1912.	17,548	28,255,390	630,779.70	2,527	1,037,726.10	1,037,726.10
1913.	25,026	39,326,400	921,182.00	3,993	869,761.20	869,761.20
1914.	30,316	37,101,420	1,181,573.80	6,292	1,623,960.20	1,623,960.20

The business of 1914 is represented by the following table:

TABLE V. — *Lands Insured against Hail.*

	Area insured	Value insured	Premium paid	Area injured	Indemnity paid
	hectares (1)	fr	fr	hectares	fr
Wheat	68,699.11	18,633,490	367,061.60	3,893.53	308,457.50
Meslin	2,598.25	630,890	17,813.—	433.51	25,924.10
Rye	5,260.03	1,063,460	21,181.—	219.30	13,156.90
Barley	2,466.97	2,782,740	56,209.90	440.68	27,128.10
Oats	6,292.13	1,128,970	25,920.90	908.08	44,132.70
Maize	12,936.40	2,810,950	27,974.10	687.50	37,730.60
Other cereals	691.75	218,210	4,917.60	29.53	1,820.80
Haricot beans	517.04	150,520	3,225.20	37.87	2,814.90
Vetch	2,134.48	526,640	11,741.—	154.48	8,128.40
Other vegetables	245.60	31,110	757.20	7.39	433.10
Colza	501.17	166,290	3,299.50	17.05	2,262.40
Tobacco	248.18	254,420	16,733.40	25.93	6,945.80
Other industrial plants	102.40	38,380	958.30	9.35	2,129.40
Garden crops	127.57	80,810	3,995.50	8.27	2,893.10
Roses	82.57	88,760	1,032.20	—	—
Vines	4,965.48	8,243,190	616,692.50	1,746.46	1,135,345.50
Natural and artificial prairies	437.29	71,140	550.20	12.28	797.60
Other cultivated lands	277.08	181,450	3,575.70	21.31	3,859.30
Total . . .	118,462.49	37,101,420	1,183,420.—	8,652.52	1,623,960.20

(1) 1 hectare = 2.47 acres.

TABLE VI. — *Insurance of cattle.*

Number of insurance societies	34
Number of members	629
Heads of cattle insured	2,332
Value of insured cattle	frs 385,157
Number dead	54
Indemnities paid	» 3,389.75
Premiums fixed in advance	» 3,296.79
Supplementary premiums	» 73.45

ITALY.

THE NATIONAL INSTITUTE OF CREDIT FOR CO-OPERATION, THE INSTITUTE OF CREDIT FOR CO-OPERATIVE SOCIETIES AND THE NATIONAL BANK OF ITALIAN RURAL FUNDS IN 1916.

SOURCES:

ISTITUTO NAZIONALE DI CREDITO PER LA COOPERAZIONE. Assemblea generale ordinaria dei partecipanti tenuta in Roma il 30 marzo 1917. Anno terzo (*National Institute of Credit for Co-operation. Ordinary general meeting of members held at Rome on 30 March 1917. 3rd year*) Rome, Casa editrice italiana, 1917.

ISTITUTO DI CREDITO PER LE COOPERATIVE. Relazioni e bilancio approvati dall'Assemblea degli azionisti del 5 Aprile 1917. XII esercizio (*Institute of Credit for Co-operative Societies. Report and balance-sheet approved by the shareholders' meeting of 5 April 1917, 12th year*). Milan, Tipografia degli operai, 1917.

BANCA NAZIONALE DELLE CASSE RURALI ITALIANE. Resoconto per il 1916. 2° esercizio. Relazione del Consiglio di amministrazione e dei sindaci all'assemblea generale ordinaria dei soci in Roma. 18 marzo 1917 (*National Bank of Italian Rural Funds. Account rendered for 1916. 2nd year. Report of the council of administration and the accountants to the ordinary general meeting of members in Rome. 18 March 1917*). Rome, Prem. Tip. Litografia V. Ferri, 1917.

In Italy the co-operative societies procure the credit necessary to their activity from various sources — popular banks, ordinary savings banks, federations of co-operative societies having banking functions, etc. — and also from the three institutions specially created for them named in the title of this article: the *Istituto Nazionale di Credito per la Cooperazione*, founded at Rome in 1913 by the free collaboration of the greatest Italian institutions of credit and thrift, the *Istituto di Credito per le Cooperative*, founded at Milan in 1904 on the initiative of the *Società Umanitaria*, and the *Banca Nazionale delle Casse Rurali Italiane*, formed recently, in 1915. The reports lately published as to the activity of these institutions in 1916 allow an idea to be formed of their object and importance.

§ I. THE NATIONAL INSTITUTE OF CREDIT FOR CO-OPERATION.

The reader will recall (1) that this institution was promoted by the Ministry of Agriculture, Industry and Commerce in a special meeting which it held on 9 June 1913 jointly with the National Thrift Fund for the Inva-

(1) For the origin and organization of the Institute see our issue for December 1913.

lidity and Old Age of Workmen (1), the Milanese Institute of Credit for Co-operative Societies and a group of ordinary savings and popular banks. The National Institute of Credit became a moral person in virtue of a royal decree of 15 August 1913 (no. 1140) and now has a capital of 8,200,000 liras furnished by thirty-nine societies or establishments which it includes. Its object is to afford credit to the co-operative societies of various kind and their consortia, both being legally constituted. With such object it undertakes the following business: *a*) it discounts for co-operative societies and their consortia bills having two signatures of qualified and solvent persons; *b*) in exceptional cases, precautions being taken by the council of administration, it makes direct advances to co-operative societies on the bills they have accepted; *c*) it grants advances on bills for work, accepted bills, mandates of public administrations and the credit they afford; *d*) it grants loans and advances to co-operative institutions on the pledge of securities of known safety or, in general, when the council of administration has established guarantees and taken precautions; *e*) it makes recoveries and payments on behalf of the co-operative societies, the societies of mutual aid, etc. and serves them generally as a bank; *f*) it rediscounts the bills ceded to it, opens current liability accounts, accepts deposits from co-operative societies and issues bonds bearing interest and maturing at fixed dates.

On the 30th of last March the ordinary general meeting of the societies belonging to the National Institute was held and the report of the council of administration on the Institute's activity, in the year which had closed, in favour of the national co-operative movement was read. From this report it is learnt that in spite of difficulties resultant on the state of war, which react in particular on the labour organizations, the co-operative societies which had relations in 1916 with the Institute, either directly as clients or indirectly by means of the consortia of the federations they represent, number 1,493, comprise 386,558 members and own a capital of 27,917,629 liras. Financial operations were especially concerned with the execution of works of public utility, such as the construction of school buildings, aqueducts and roads, and with works of beneficence and agriculture.

Last year the Institute accepted for discount 14,441 bills for 56,885,256.07 liras as against 12,582 bills for 42,802,768.57 liras discounted in 1915. The increase was therefore one of 1,859 bills and 14,082,487.50 liras.

If the variations in the situation month by month be regarded, the amount of business is seen to have followed an ascending line so that the paper held on the 31st of last December amounted to 18,826,334.58 liras as against 11,836,110.57 liras at the end of the preceding year, giving an increase of 6,990,224.01 liras or more than half.

Of these bills 9,782 for a total amount of 44,610,467.57 liras concern cessions of mandates; 2,375 for 3,420,208.80 liras are for commercial operations; 346 for 2,229,728.20 liras are for direct loans; 369 for 2,083,372.60

(2) *Cassa Nazionale di Previdenza per l'invalidità e la vecchiaia degli operai.*

liras are for direct loans with an agricultural privilege as to 4,218 hectares (1) of cultivated land ; and 1,569 for 4,541,478.90 liras have been ceded by intermediary institutions.

The average amount of the bills was 3,496 liras as against 3,417 liras in 1915.

The credit was distributed as follows among the various forms of co-operation :

societies of production and labour and their con-		
sortia	liras	43,150,140.35
" " agriculture and their consortia . . .	"	2,263,848.59
" " credit and intermediary institutions .	"	4,824,360.59
" " consumption and their consortia . .	"	1,841,416.61
" for building and institutions for pop-		
ular dwellings	"	3,329,409.67
" of various kinds	"	1,476,080.26

The distribution according to districts was as follows :

North	Italy	36,297,709.31	liras
Central	"	18,667,811.22	"
South	"	1,919,735.54	"

A progressive increase also affected the sum in hand, which in 1916 was 333,659,456.19 liras or 138,610,455.02 liras more than in 1915. The items of the interest-bearing current accounts, which likewise increased, were distributed as follows : *receipts* 21,743,720.53 liras in 1916 against 4,482,449.60 liras in 1915 ; *expenditure* 18,713,107.41 liras in 1916 against 4,016,951.03 liras in 1915 ; and the surplus balance at the end of 1916 was therefore 3,496,111.69 liras.

The activity of the various offices of inspection which this Institute founded in many co-operative centres also has a special importance. The National Institute of Credit for Co-operation was indeed one of the first bodies in Italy to organize a service of inspection on just principles. For this end it made special offices charged to give to their client co-operative societies such aid in the matter of administrative and book-keeping technique as they should need ; and to watch over the course of the co-operative businesses and the development of the public works to which it gives financial help. These offices work successfully at Rome, Florence, Genoa, Bologna, Venice, Verona, etc. They are notably profitable both to the Institute, which is enabled by their assiduous vigilance to protect its credit as effectively as possible, and to the co-operative societies which in many cases when the call came to the colours simply entrusted their administration and technical management to them. One of them is particularly worthy of mention, the *Ufficio di Assistenza e Consulenza per le Cooperative Agricole* which

was recently created in the affiliated society at Bologna in response to desires expressed at the National Congress of Agrarian Co-operative Societies, held in Milan last December (1). This aims at regulating credit for agricultural co-operation, which is destined, especially in North Italy, to have a great future when it has been completed and directed by such an organism as this office at Bologna proposes to become, one fitted assiduously and perseveringly to watch over the technique and administration of the agricultural undertakings of the consortia.

Finally this Institute's balance-sheet of 31 December 1916, that namely for its third year, contained the following as its most important items: a) Among liabilities: subscribed capital 8,200,000 liras; reserve 64,953 liras; fund for inspecting offices 10,716 liras; interest-bearing current accounts 3,496,111 liras; bonds bearing interest at fixed dates 6,797 liras; clients and correspondents 3,625,981 liras; simple current accounts 341,191 liras; rediscounted bills 8,925,837 liras. b) Among assets: in hand 274,743 liras; paper 18,826,334 liras; public bills belonging to the Institute 2,456,651 liras; balance of subscribed shares 1,840,000 liras; banks and correspondents 2,667,770 liras.

The year's net profits reached 296,728 liras, of which 63,645 liras were appropriated to the reserve fund which was thus raised to a total of 128,598 liras.

§ 2. THE INSTITUTE OF CREDIT FOR CO-OPERATIVE SOCIETIES.

This Institute, organized in the form of a limited liability society, was founded as has been said, in 1904 on the initiative of the *Società Umanitaria* and with the collaboration of the greatest popular banks and some co-operative societies. Its object is (article 3 of the by-laws) to "take part in the development of co-operative societies of production, labour, consumption and credit which profit the labourers, employees, peasants and *métayers* and the small labourer proprietors, facilitating the working of these societies by the means of credit". To this end the Institute undertakes the following business: a) it discounts for co-operative societies bills having two signatures, cheques, notes of pledges, certified notes of work, accepted bills, and mandates of public and private administrations known to be solvent; b) it grants loans or makes advances to co-operative societies on pledged securities or pledged credit or in return for the cession of mandates of public or private administrations; c) it receives deposits of savings of not less than 10 liras and pays interest on them at the rate of 3 $\frac{1}{4}$ per cent. net; it receives deposits of sums on open current account at 2 $\frac{1}{2}$ per cent. net; it issues interest-bearing bonds having fixed terms; and it makes recoveries and payments on behalf of co-operative societies, etc.

On 31 December 1916 its share capital was 1,624,500 liras made up of

(1) See our issue for March 1917, page 30.

21,660 shares of 75 liras each distributed among 522 shareholders. On the same date the reserve fund amounted to 449,125 liras.

During 1916 this Institute effected 3,455 operations of credit with 293 co-operative societies for a sum of 24,265,927.28 liras, distributed as follows :

1919 operations with	126 co-op. societies of production and labour	liras 15,671,552.02
689 " "	78 " " of consumption	" 3,173,406.73
126 " "	10 " " for popular dwellings	" 2,741,610.79
161 " "	10 " " of agriculture	" 1,361,515.00
560 " "	69 " " of various kinds	" 1,314,842.74
<hr/>		
3455 operations with	293 co-op. societies	liras 24,265,927.28

The operations were of the following kinds :

757 operations	liras 1,307,143.02	discount of commercial bills.
669 " "	6,812,922.25	direct loans guaranteed by the cession of mandates of public administrations.
289 " "	8,392,870.98	mortgage loans.
1218 " "	5,601,627.83	advances in the form of loans.
6 " "	99,900.00	cautionary deposits.
516 " "	2,051,463.20	endorsements, guarantees.
<hr/>		
3455 operations	liras 24,265,927.28	

These operations were geographically distributed as follows :

Lombardy	655 operations with	40 co-operative societies	liras 7,680,505.85
Piedmont	344 " "	57 " "	" 2,954,921.27
Liguria	32 " "	4 " "	" 1,057,715.00
Emilia	2,230 " "	170 " "	" 7,471,638.30
Tuscany	130 " "	11 " "	" 4,151,460.99
Latium	24 " "	6 " "	" 104,040.00
Other districts	40 " "	5 " "	" 845,645.87
<hr/>			
3455 operations with		293 co-operative societies	liras 24,265,927.28

Further on 31 December 1916 the fiduciary deposits reached the sum of 3,081,219.81 liras and the paper that of 1,491,714.61 liras. At the close of the year there was a net profit of 28,507.08 liras.

Between 1 July 1904 and 31 December 1916 this Institute, the most ancient of the Italian institutions specially affording credit to co-operative societies, effected 37,002 credit operations for a total sum of 202,273,070 liras.

§ 3. THE NATIONAL BANK OF ITALIAN RURAL FUNDS.

This bank was founded in the form of a co-operative limited liability society, its principal aim being "to furnish aid to the rural funds and other co-operative societies which have the diffusion of credit among small agriculturists as their object" (1). The bank began work on 1 January 1915 with a capital of only 125,000 liras, but it had otherwise and at a privileged rate largely insured the discount of its paper at the *Banca d'Italia* and some flourishing co-operative banks. The amount of its loans in 1915 — all of which had the form of short-term bills for four or, exceptionally, six months — was 948,829 liras. In 1916 it was 2,640,410 liras, giving an increase of 1,741,581 liras.

The method of regulating the course of business is simple. The bank knows how its adherent societies go on because they are visited by its inspector and because its manager is in touch with their management. The manager communicates to the bank's managing body his personal impressions as to the soundness of the societies, and further brings back with him from his tours a copy of the reports on the inspection of societies and all accessory forms and notes. The bank's management has special archives among which each agricultural society has or will have a place in which to store its by-laws, accounts, balance-sheets, reports, etc. On the basis of these documents and the director's report the bank's council of administration fixes the limits of the credit available for each agricultural society, either for the discount of its paper or in the form of direct loans. This credit is of course subject to periodic and extraordinary variations. The societies having such credit at their disposal need only send the bills in their portfolios or their non-acceptances to the bank in order to receive the correspondent net sum, which is sent in the form of cheques on the free banks of the *Banca d'Italia*, payable at sight and issued by the National Bank of Rural Funds.

In 1916 the savings deposits increased notably. They amounted at the end of 1915 to 49,955 liras and on 31 December 1916 to 425,327 liras.

To conclude, the National Bank of Italian Rural Funds should be judged not only on what it has been able to accomplish in such an exceptional period as that which it is now traversing, but also on what it hopes to accomplish in normal times. Its beginnings allow good hopes to be entertained of its further activity.

(1) For its organization see our issue for June 1916, page 19.

RUSSIA.

THE CENTRAL CO-OPERATIVE UNION OF FLAX GROWERS.

SOURCES :

- МАКАРУК: (I.) Земская дѣятельность по поднятію и развитію льноводства (*The Zemstvo's Activity for the Development and Production of Flax*) in Земское Дѣло (*The Work of the Zemstvo*) No. 20, Petrograd 1912.
- MASLOV: (S.) Центральное Товарищество льноводовъ (*The Central Co-operative Union of Flax Growers*) in Vestnik Kooperazii (*The Messenger of Co-operation*) No. 6, Petrograd, July 1916.
- МИШАЙЛОВ: О кооперативномъ сбытѣ льна (*The Co-operative Sale of Flax*), in Vestnik Kooperazii (*The Messenger of Co-operation*), No. 9. Petrograd, December 1914.
- MASLOV: (S) Учрежденіе центрального общества льноводовъ въ Москвѣ (*The Organization of the Central Co-operative Union of Flax Growers*), in Vestnik Kooperazii, Nos. 9, 10. Petrograd, December 1915.
- В: Кооперативный сѣздъ льноводовъ (*The Co-operative Congress of Flax Growers*) in Vestnik Kooperazii, No. 7. Petrograd, September 1916.
- ***: Итоги перваго года дѣятельности центрального общества льноводовъ (*The Balance-Sheet for the First year of Business of the Central Co-operative Union of Flax Growers*), in Vestnik Kooperazii, No 10. Petrograd, December 1916.
- СЛЫСЕНКОВ (I.): Льняныя операціи въ ярославской губерніи (*Operations in Flax in the Province of Jaroslav*), in Вѣстникъ Мелкаго Кредита (*The Messenger of Small Credit*) No. 3, Petrograd, 1917.
- ***: Рыбинскій кооперативный союзъ (*The Co-operative Union of Rybinsk*), in Vestnik Melkago Kredita (*The Messenger of Small Credit*), No. 45, 1916.
- KALINSKY: (B.) Цѣны на сельско-хозяйственные продукты (*The Prices of Agricultural Products*), in Zemledeltscheskaia Gazeta (*The Journal of Agriculture*), No. 9, 1916.
- ТШАВАНОВ: The Central Society of Flax Growers, in The Russian Co-operator, No. 1. London, December 1916.
- ***: The Co-operative Export of Flax, in The Russian Co-operator, No. 2. London, February 1917.
- GRINENCO: Il lino russo ed il suo posto nella produzione, nel commercio e nell'industria mondiale del lino (*Russian Flax and its Place in the World's Flax Production, Trade and Industry*) in Monitore italo-russo (*Italo-Russian Monitor*) No. 1. Rome, January 1917)
- ***: Производство льна за границей (*The Production of Flax Abroad*) in Vestnik Finansov (*The Messenger of Finances*), No. 44. Petrograd, October 1916.

The most salient fact in the history of the Russian co-operative movement in the last two years is the formation of the Central Co-operative Union of Flax Growers which groups almost all the co-operative associations for the sale of flax in European Russia.

The exceptional importance of this co-operative organization depends on the fact that flax growing is one of the most notable branches of Russian

agriculture, linen fibre standing third among articles of export while corn and wood are first and second.

Flax is grown altogether in twenty-seven provinces and of late years its cultivation has tended to become more and more important. While in the five years from 1901 to 1905 the average area under flax was 1,017,677 deciatines (1) in 1913 the area under flax was 1,099,842 deciatines. The progressive increase in the area on which flax is grown becomes more evident if the data for the years from 1901 to 1913 be examined.

TABLE I. — *Progressive Increase of the Area under Flax from 1901 to 1913.*

Year	Area under Flax. Deciatines	Total Harvest. Thousands of Puds (2)	Average Harvest by Deciatine. Thousands of Puds
1901-1905	1,017,677	19,438,600	19.1
1906-1910 (average) .	1,008,270	29,008,200	28.8
1909	982,103	22,409,800	22.8
1910	968,610	19,452,600	20.1
1911	1,026,378	21,741,200	21.2
1912	1,039,305	32,455,600	31.2
1913	1,099,842	31,906,700	29.01

As appears from this table the years 1909 and 1910 showed a sufficiently marked decrease in the area under flax which resulted in the reduction of both the average and the total harvest. The lack of an organization for the sale of linen fibre aggravated the situation, and the question actually arose as to whether it would not be profitable to supersede flax by more profitable crops.

The zemstvos were the first to foster this branch of agriculture with every possible care, and they helped it by means of a series of measures. These were the following :

1) The supply of flax growers with seed of the best quality, a measure which in itself did much to increase production, for the grain of flax easily deteriorates in districts not completely adapted to this form of agriculture. The zemstvos made a provision every year in the best producing districts and resold to growers in other provinces.

2) The cleansing of the seed which usually was not only mixed as regards quality but also was mixed with grass seed, to the detriment of the quality of the flax since strong was mingled with weak seed, and to the increasing of labour since it became necessary to weed out the grass from the growing crop several times over.

3) The purchase of machines and the teaching of modern technique in treating flax.

4) A campaign against the adulteration or falsification of the product.

(1) 1 deciatine = 2.698 acres.

(2) 1 pud = 40 lbs.

In a period of hardly a few years the activity of the zemstvos notably improved flax growing. We must insist on this point in order that the full importance of the work of the Central Union of Flax Growers may be understood.

But if relatively much has been done to improve flax growing hardly anything has on the other hand been done to improve trade in this product. This necessarily impeded progress in flax growing which largely depends on the foreign sale. The linen fibre produced in Russia represents 82.7 per cent. of the world's total yield, 6,942,000 out of 7,843,000 quintals (1). So enormous a quantity cannot be absorbed even partially by Russian industry which deals altogether with only 2,080,000 quintals of the fibre. The remainder — namely 67.6 per cent. — must be exported. Thus flax growing necessarily depends on the development of foreign trade.

Until the Central Union of Flax Growers was organized trade in this product was much below the normal. The peasant grower lost a sufficiently large part of his rightful profit to middlemen, and often he was hardly able to cover the cost he had to incur in treating the fibre.

It was not until 1910 that various attempts were first made in some districts to organize the sale of flax rationally, but as usual they were isolated. Thus in the province of Emissejsk in Siberia the local administrative for interior colonization began to offer to villages producing flax its help in selling the fibre. It advanced part of the price of the flax entrusted to it by the peasants, sent this to the factories, and paid the remainder of the price when payment had been received from the factories. But the sum of which the administrative disposed for advance payments was too small — only 10,000 roubles (2) — and therefore the percentage paid in advance was too low and it could not apply its system largely. Another experiment was made in the province of Jaroslav, where four agricultural co-operative societies united to organize foreign exporting, and there were yet other experiments in the province of Pskov and elsewhere.

The experiments which succeeded were based on the co-operative principle. The co-operative societies of Villensk in the province of Novgorod and those of Zukalovsk and Gorelsk in the province of Jaroslav, which achieved a true commercial success, deserve first mention.

When the war broke out a grave crisis ensued which brought ruin to hundreds of thousands of peasant flax growers, who had previously exported about eighteen million puds of fibre a year. The situation was aggravated because a defective harvest was added to the cessation of the export trade.

The co-operative credit societies at once participated largely in the measures which tended to diminish the crisis. The fall of prices which was feared was partly prevented by the very insufficiency of the harvest, and otherwise by guaranteed advances on deposited flax made by some zemstvos, and by some co-operative societies which in this had the help of

(1) 1 quintal = 220 lbs.

(2) 1 rouble = about 2s. 1 ½ d. at par.

the Popular Bank of Moscow and above all of the Bank of the State which afforded them special credit.

The influence of these advances on prices was felt immediately. Thus in Rjevsk in the province of Vitebsk there was a rise from 25 to 52 roubles, while a less notable rise in Kovensk was of 25 per cent.

The influx of flax into the depots naturally made the co-operators think of organizing the sale. A first action taken with regard to the home market did not succeed because Russian spinners showed themselves the enemies of the co-operative movement. The only field remaining for the co-operative societies was therefore that of exportation. In order to organize this it was necessary to create a network of organizations, beginning with the local and district unions.

On 1 June 1915 eight unions composed of 107 co-operative associations had already been formed: the union of Rjevsk had 40 associations, that of Schatzk 12, that of Suschevsk 11, that of Volokolamsk 18, that of Kaschir 5, that of Tver 8, that of Setarovsk 6 and that of Betejsk 7.

A central organization which could unite these groups was lacking. In April 1915, a memorable date in the history of the Russian co-operative movement, the commission for the preparation of the by-laws of the future Central Union of Flax Growers was founded at the council of the Congress of Representatives of the Linen Industry, an organization which unites growers, traders and spinners in the defence of their common interests in the State. The commission was composed of representatives of the Committee of Rural Funds, the Popular Bank of Moscow and the co-operative associations and resolved as follows regarding the basis of the new organization: "It is the object of the Central Co-operative Union of Flax Growers to help the co-operative associations of flax growers to organize selling in the best conditions, and to buy for them seeds, manures and machines and organize more rationally the growth and the treatment of flax. Only co-operative credit societies, co-operative agricultural societies and co-operative consumers' societies concerned with the sale of flax may belong to the Central Union".

In order to become a member of this union every co-operative society must pay an entrance fee of 10 roubles and buy at least one share of 50 roubles. Each society has only one vote and liability for the union's business extends over all the property and capital of a member society.

The Central Administration of Agriculture approved these by-laws on 17 July 1915 and the new organization then became active immediately. At the outset the Central Co-operative Union was composed of 43 member co-operative associations, namely 6 district unions, 3 provincial agricultural societies and 34 other societies. On 1 May 1916 it united 163 organizations of which eleven were unions; and at the end of 1916 twenty-two unions comprised more than 400 associated co-operative societies composed of hundreds of thousands of flax growers in the flax producing districts of European Russia.

All necessary aid to exporting was given by the Popular Bank of Moscow, which had already reached good results by an experiment in working

with the two district unions of Volokolamsk and Rjevsk which exported fibre to Great Britain.

The time was unfavourable for the Central Union, for the closing of the ordinary roads of export, and the lack of transport in countries which now had to be traversed, made its task more than difficult. Public opinion received the union's first measures sceptically. Many persons, both theoretical and practical co-operators, feared that so sudden a start was premature and maintained that the co-operative system ought to be applied gradually. Their fears were unfounded. Thanks to its perfect organization the Central Union met with a success as rapid as unexpected in all the markets of the world. During one year of business it entered into solid relations with Great Britain, France and Japan; established such with most of the large Russian factories; formed for itself a large clientele; and acquired an important position on the flax market. Further it entered into relations with the factory of the union of zemstvos, having a representative among the latter's managers. Its representatives have likewise been admitted to the council of the Popular Bank of Moscow on which foreign business is transacted and to the government Council for Flax and Jute.

In its first year, 1915-1916, the Central Union sold abroad 61,310 puds of linen fibre for a total sum of 700,684 roubles, distributed as follows:

TABLE II. — *Export of Flax abroad by the Central Co-operative Union of Flax Growers.*

Countries of Export —	Fibre Exported —	Total Value —
	Puds	Roubles
Great Britain	54,770	6,268,800
France	6,000	63,000
Japan	540	10,884

On the home market business was done with twelve firms to which 41,503 puds 39 funt (1) of linen fibre, of the total value of 465,909 roubles, were sold. Most of this amount was received by the unions, with whom the Central Union proposes in the near future to deal exclusively, thus constraining them to organize themselves. Further, the Central Union has organized the provision of the army at lower prices than the dealers.

In the same period 15,000 puds of seed were sold to make oil for a total sum of 27,682 roubles, and 72,586 puds of selected seed were bought for a total sum of 218,614 roubles. More than 10,500 deciatines were intended to be planted with this chosen seed which was examined before its sale at the experimental station in Moscow. It was bought by the various organizations in the following proportions; 32,789 puds (45 per cent.) by the co-operative unions, 22,030 puds (30 per cent.) by the zemstvos, and 17,667 puds (25 per cent.) by the co-operative societies. During the first

(1) 1 funt = 1 lb.

year, 1915-1916, the turnover was more than 1,500,000 roubles. It was possible to obtain these results in spite of the scepticism of the public and insufficient propaganda, and in spite of the small number of truly expert co-operators within this sphere.

It should be noted that the work of distributing the selected and inspected seed is enormously important to flax growing. For the first time the exchange of seed among co-operative societies, without the intervention of dealers, has been organized. The zemstvos which began the distribution of selected seed were often obliged to have recourse to dealers, and were not seldom cheated, so that the loss of whole harvests in a given district resulted. As early as 1916 the influence of this work of the union was first felt, the good quality of the seed causing in many places harvests notably above the average. The Central Union was able to pay the peasants from one to three roubles a pud more than they had obtained in the market and yet to make a profit of 5,981 roubles.

At the congress held at Moscow in August 1916 it was resolved to increase the financial strength of the Central Union. The number of shares which shareholders must buy was therefore increased. Each co-operative union is now obliged to buy at least three shares, each co-operative credit society five shares, each provincial agricultural society ten, and each consumers' and agricultural co-operative society two. The societies may not make advances of funds. The Central Union retains 2 kopeks (1) per pud sold for costs of management and 10 kopeks for the formation of an insurance fund. The relations of the Central Union with its member associations have been unified. From the second year onwards each co-operative association must present to the Central Union data as to the quantity and quality of fibre, the market price, and the conditions of payment which it desires. Thus only will the Union consent to become active, and to regulate, as circumstances render necessary, prices and the forms in which payment is made.

Besides this commercial enterprise the Central Union exercises another no less important form of activity. In addition to its weekly bulletin it has published leaflets of propaganda and has furnished information as to the treatment of flax and the sale of products. For this object it has founded a special office to which an instructor and ten specialists belong.

There is no doubt that in the near future, as soon as the idea of co-operation has penetrated the masses, the inflow of flax into the co-operative depots will enormously increase.

We have but to examine the development of this form of co-operation in the various districts of Russia, as shown by the good results of the first year, in order to find confirmation of the forecasts of the managers of the Central Union.

Thus at Rybinsk the people are beginning to understand that it is the co-operative sale of flax which is the most profitable. The number of co-operative associations which undertake in advance business guaranteed

(1) 1 kopeck = about $\frac{1}{4}$ d.

by deposited flax increases constantly. On 1 December forty-six co-operative credit societies and two *volost* funds in the union of Rybinsk did business in advance. On 1 December, before the operations had been completed, 35,614 puds of a total value of 771,968 roubles had been deposited. Further the quality of the fibre, thanks to the work of the instructors, improved sensibly. For this year the union of Rybinsk has anticipated 500,000 puds of fibre.

The Union's commercial success is great but the other work it has accomplished is even more important.

Russian co-operation as concerned with flax has been obliged to undertake very complicated enterprise in order to solve its own problems. First among such undertakings is the campaign against the monopoly of the trade in flax by dealers with foreign countries.

Before the war the exporting of flax was exploited by a small number of foreigners who held a sort of monopoly. They fixed prices. Consequently Russian dealers, instead of exporting on their own account, in the large majority of cases merely executed the orders of the foreign exporters.

During the war the British government entrusted to a firm the monopoly of its purchases of flax in Russia. The Russian government formed a special committee to regulate the sale of flax, and this committee transmitted to the Central Co-operative Union and the Russian Stock Company for Trading in Flax its exclusive right to sell fibre abroad. The two associations came to an agreement, in virtue of which the Central Union now seeks to solve the great problem of providing allied and neutral countries.

Altogether in one year of business the Central Co-operative Union of Flax Growers has been able to exercise activity of exceptional importance: 1) it has undertaken the defence of the interests of peasants; 2) it has largely eliminated middlemen from the flax market; 3) it has notably weakened the domination of this market by foreign capital; 4) it has organized the provision of growers with selected seed, manures and machines, establishing agreements for the regulation of the exchange of seed among co-operative associations of flax growers, and agreements between its member co-operative associations and those of the *Kustari* for the purchase of machines; 5) it has diffused knowledge as to agronomy and co-operation; 6) it has defended and protected flax growing in the zone of military operations (provinces of Pskov and Vitelsk); 7) it has furnished the information necessary to the organization of co-operative selling and the treatment of products.

Hitherto all this activity of the Central Co-operative Union of Flax Growers has not reached beyond European Russia. It is only now that the first isolated attempts at organizing the co-operative sale of flax are being made in Siberia.

In Siberia flax growing is not very common, being responsible for only 7.8 per cent. of the world's total yield of flax. This figure represents, it is true, a crop far larger than that of France and Belgium taken toge-

ther, but only 11.9 per cent. of the total crop of Russia. The area on which flax is grown is small as compared with that under other crops. At Enisseisk it is only 0.8 per cent. of the cultivated area. In the province of the same name the yield of flax in 1914 was 90,000 puds of fibre and 160,000 puds of grain, having a total value of 500,000 roubles. In the province of Tomsk the harvest yielded 350,000 puds of fibre and 400,000 puds of grain. But the organization of co-operative sales has hardly begun, the chief obstacle to it being the fact that no advances are granted. Only two attempts in the latter direction were recorded last year. In the province of Tomsk the co-operative credit society of Majlianisky could sell at high profit 100 puds deposited in its premises. In the province of Enisseisk the co-operative society of Novoe Selovskoe sold 440 puds on which a profit of 2.5 roubles a pud was realised. But the great mass of growers still sell at ridiculous prices, thus leaving to middlemen an annual revenue of more than 1,320,000 roubles.

MISCELLANEOUS INFORMATION RELATING TO CO-OPERATION AND ASSOCIATION IN VARIOUS COUNTRIES.

FRANCE.

THE CO-OPERATIVE SOCIETIES FOR THE CULTIVATION OF ABANDONED LANDS AND THE RECONSTRUCTION OF DESTROYED VILLAGES. — Comptes rendus des séances de l'Académie d'Agriculture de France (*Reports of the Meetings of the Academy of Agriculture of France*). Vol. III, No. 21, Paris, 6 June 1917.

At the meeting of the Academy of Agriculture of France, held on the 6th of last June, M. Louis Tardy gave precise data as to the activity exercised by co-operative societies for the cultivation of abandoned lands, particularly in the department of Haute-Garonne.

These co-operative societies are formed among all agriculturists who cede to a society the lands they can no longer cultivate owing to difficulties caused by the war. The object of the societies is the cultivation in common of the properties and lands, their best utilization and the sale of their products under the direction of the departmental Committee for the Cultivation of Abandoned lands.

The co-operative societies which have commissioned this committee to cultivate lands on their behalf now number seven in Haute Garonne. They group 155 members who contribute from 15 to 200 hectares (1) each, and 2,061 hectares in all. Their constitution is civil in form; their duration is limited to that of the war; each is administered by an administrative council having at least three members elected by the general meeting and renewable every year. This council nominates its president who represents the society in all its civil and jurisdictional relations.

Every year in December a general meeting is held to which is submitted all the society's business in the past year, that is to say in the agricultural year which begins on 1 November and ends on 31 October.

The balance-sheet is inspected by the departmental committee, and when it has been adopted profits and losses are divided as follows. In the case of profits one half is distributed among all the members in the order of the priority of their admission while the other half constitutes a fund held in common by the society in question and others like it within the department. This fund covers losses on their business which certain of these societies, showing a deficit, may have suffered; and its balance is distributed among similar societies in the department, in the order of their importance, and within each one of them among the members in the order of the priority of their admission. If the reserve funds are insufficient to cover the losses

(1) 1 hectare = 2.47 acres.

the excess is borne and is distributed according to the conditions fixed for the distribution of profits, that is to say in the order of the priority of the admission of members or lands brought under cultivation. The importance of the contribution of each member of a society and the society as a whole is finally determined by the departmental committee. The general meeting decides whether it be necessary to make an inventory and a distribution at the end of every year or to unite several years in one inventory.

The general council of Haute-Garonne granted to the Departmental Committee for the Cultivation of Abandoned Lands an advance of 30,000 francs to allow of immediate cultivation. Work was at once undertaken to save the vines where this was worth while and to do some spring sowing (of potatoes, maize, buckwheat, beans, etc.). The necessary seed was bought and also sulphate of copper and sulphur, and forage and oats in order that the horses lent by the military administration might be fed. The large influential landowners, who at first were inclined to hold back, became the most devoted partisans of the organization and contributed important properties to it.

In the spring of 1917, 135 hectares had thus been cultivated, In the autumn 1,000 further hectares will be ready to be sown with wheat, oats and barley. In 1918, 2,220 hectares in this one department will have been brought under cultivation. During the two years the lands of mediocre fertility will be cleaned and made into pasturages.

The anticipated expenditure in the two years was of 627,425 francs ; the anticipated receipts, as most carefully estimated, were 860,500 francs ; and this gave an anticipated profit of 233,075 francs. The departmental committee asked, in the name of the seven co-operative societies constituted, for a total advance on anticipated sales and receipts of 400,000 francs, from which sum each of the societies would receive from 35,000 to 100,000 francs.

The competent authority received the application favourably, giving the societies the benefit of article 6 of the law of 7 April 1917 which is as follows : " Special advances may be made for a maximum term of three years to the bodies contemplated by article 2 of the law (i. e. the departments, communes, co-operative societies and associations for mechanical agriculture) from the fund for special advances to agricultural co-operative societies contemplated by the law of 29 December 1906 ".

The example set by Haute-Garonne has aroused the liveliest interest and the idea which has there been so well followed is making progress in other departments. It is believed that co-operation will give important help to the reconstruction of the invaded districts, notably in Aisne, Meurthe-et-Moselle, Meuse and Somme.

The application of co-operation to the reconstruction of the zones devastated by the war has already been attempted in another form. A civil co-operative society for the reconstruction of the destroyed villages of Glanennes, Courdemanches, Hucroy and Chatelraould has been founded in Marne. Only a few scattered houses remained in this district. Today it has been cleared and reconstruction has begun. The society groups individual efforts and resources with a view to restoring the buildings injured or destroyed by

the war. Thus it ensures a greater economy in expenditure and the better utilization of the funds destined by the members for this building. The society provides for all possible technical, hygienic and aesthetic improvements, and by grouping the necessary funds gives a better guarantee to contractors. A perceptible economy can thus be realized in the purchase of materials and cost of labour. It may be added that without co-operative organization the transport of building material would have been impossible. The work is executed on behalf of individual members who must contribute the necessary funds in cash or realizable securities, or by assignments to the societies of indemnities due for war damages. A common fund is constituted by charging one per cent. of the total costs of building to meet the society's expenses for all its members. Interesting model by-laws, which allow minors and the incompetent to profit by these societies, have been drawn up.

It is thought that these co-operative societies for reconstruction will be multiplied and have a fairly important development, thanks to the immediate advances of indemnities for war losses, to meet urgent needs.

GREAT BRITAIN AND IRELAND

AN IRISH CO-OPERATIVE SOCIETY FOR GROWING WHEAT.— From *Better Business*
Vol. II, No. 3. Dublin. May 1917.

Co-operative farming in an original form has been practised in Foynes, a small village in County Limerick and on the Shannon.

In the autumn of 1915, when the price of food was beginning to be felt severely by the workmen of the village, Lord Monteagle suggested that they might form a society to grow wheat for the supply of their own wants. He undertook to rent to the society a field of heavy corcass land, seven statute acres in extent, at the rate of £2 an acre. In the first year the constitution of the society provided that it should have only twenty-eight members to be selected by Lord Monteagle; for no more land was available and it was desired that selected members should secure the success of the experiment and smooth the path to future development. After its first year the society was registered as a co-operative society having open membership.

The principal rules of the society, as it was first constituted, were that the price of each share should be 30s. — 5s. being payable on allotment and 6d. a week for fifty weeks; that shareholders more than four weeks in arrears in the payment of weekly instalments should be liable to suffer forfeiture of their shares; that any forfeited shares should be allocated to new and suitable applicants who should pay their full value on the same terms as the original members; that the society should be administered by a committee of seven members elected by the shareholders,

such committee to meet at least once a month and to call a general meeting of shareholders when they deemed it necessary.

The amount realized on the allotment of shares was £7. All the seed had been sown on 6 November 1915. The seed used was 126 stone of "White Standup" and "Garton's Victor" — 18 stone to the statute acre — and cost eight guineas. Lime for the land at 1s. 4d. a hundred-weight cost £1. 18s. 8d. Basic slag at £3. 16s. 6d. a ton cost six guineas. The labour, which might in other societies have been carried out by the members themselves, was a heavy burden. Harrowing and sowing cost £10. 7s. 3d.; the hire of a reaper and binder with extra men and horses £4. 18s. 6d.; rolling the wheat 8s. 6d., stooking £1. 2s. 10d.; and threshing £8. 13s. 8d. The society's total expenditure was £58. 6s. 3 ¹/₂d.

The total yield of grain was 1,052 stone and the total yield of straw 8 ton. 17 cwt. 2 qurs. 16 lbs. The grain was divided among the members, 37 ¹/₂ stone to each. The straw was sold and realized about £19. 12s.; while some damaged wheat, sold at 6d. a stone, fetched 16s., and £2 was realized by letting the grazing. The society's total receipts were £64. 8s. 9d. After all expenses had been met each member received 37 ¹/₂ stone of wheat, and there was a surplus of £6. 2s. 5 ¹/₂d. which it was intended to reserve but which was divided among the members because the new constitution was about to be adopted.

The example of this society ought to stimulate labourers and artisans in other parts of Ireland to imitation. It will not be easy to rent land at £2 an acre, but even had the Foynes Society paid a higher rent they would have made a profitable experiment.

NORWAY.

THE AGRICULTURAL CO-OPERATIVE MOVEMENT. — *International Co-operative Bulletin*, No. 2, 10th year, London, February 1917.

The *Landusholdningsselskapernes Faelleskjøb*, the central co-operative agricultural association of Norway for collective purchase, began work only in 1896; although the joint purchase of artificial manure and fodder was undertaken by individual farmers' societies in the country as early as 1890. The central association developed rapidly, its turnover increasing from 411,980 crowns (1) in 1897-1898 to 14,292,077 crowns in 1915-1916. At first it confined itself to supplying manure and fodder; but before long it also undertook the supply of seeds, machinery, agricultural implements, iron wire, hedge-poles, petroleum and other articles. It set up a seed-cleaning department, a mill at Kambo and a machinery department, and in 1906 it built its first warehouse which was soon followed by several others.

(1) 1 crown of gold = 1.0112s at par.

In 1913 it acquired for 50,000 crowns a large site at Sörengen, and on this erected large warehouses and cranes and established railway communications. The mill at Kambo has, in addition to elevators and bridges, a silo capable of holding 60,000 tons of corn. Housing accommodation is provided for officials and employees.

In 1911 the Association for Norway's Welfare together with various agricultural co-operative societies built at Christiana the "Farmers' House", in order to provide agricultural institutes with good and commodious premises at the lowest possible prices. The *Faelleskjøb* has its offices in the "Farmers' House" and holds the majority of shares in it.

It supports the Association for Norway's Welfare, which promotes the co-operative idea, bearing half the expenses of its two legal advisers; and it took a prominent part in establishing co-operative butchery.

The *Faelleskjøb* comprises 789 agricultural societies, having altogether about 28,000 members. Its official organ, *Samvirke*, is published fortnightly and has a circulation of 30,000 copies.

SPAIN.

THE CO-OPERATIVE DAIRY OF THE "CASA DE GANADEROS" OF SARAGOSSA.

— Memoria sobre el funcionamiento y resultados de la lechería cooperativa en el año 1916 (*Memorandum on the Working and Results of the Co-operative Dairy in 1916*) Tip. y Encuadernación "Heraldo". Saragossa, 1917.

The co-operative society for the sale of milk, founded by the *Casa de Ganaderos* in Saragossa, was among the first realizations in Spain of the co-operative principle in the dairy industry (1). The foundation took place quite recently, in 1915, and the society became active on 1 April 1916.

This co-operative dairy has other objects in addition to the sale of the milk and the derivative products provided by its members. It seeks to organize the insurance of milch stock, to facilitate the acquisition of milk by the methods most fitted to satisfy the precepts of hygiene and the wants of the consumer, and also to attain to other ends which we will cite presently.

The memorandum from which we take these data refers to the activity of the dairy in the nine months of 1916 for which it was at work. In this period the members contributed altogether 259,560 litres (2) of milk of which 96,200 litres were sold on the spot in the vessels in which they were received, while 86,612 litres were sold at buyers' house in 103,100 bottles of one, a half and a quarter litre. The rest of the milk was sold in the form of butter or cheese, that is 14,050 packets of butter and 3,450 small double-cream cheeses. 11,500 litres of skim milk were also sold.

It is a proof of the good organization of this co-operative society that

(1) See our issue for June 1917, page 1.

(2) 1 litre = 0.88 quart.

in April 1916, its first month of activity, fourteen members furnished 14,270 litres of milk and in December forty-three members contributed altogether 44,378 litres. The same rise is found in the sales, for all the available products were sold. One of the difficulties to be surmounted is however that of selling in the summer months in which sales diminish considerably. Hitherto the remedy has been found in making salt butter which has all been sold in the following months. The managing council is studying the question of sterilizing the milk, the dairy being able to dispose of all the necessary machines for this process.

Hitherto the dairy has paid members for the milk they supply from 28 to 30 centimes a litre, according to whether or not the membership fee and the cost of insuring the stock is deducted. The dairy's selling price to consumers is 40 centimes a litre for pasteurized milk delivered at their houses and 35 centimes for that fetched from the dairy. The members of the *Casa de Ganaderos* receive a bonus of 10 and 5 per cent. on these respective prices.

In the year we are examining the dairy's receipts for the sale of the milk and derivative products amounted to 82,864.58 pesetas (1) and its expenses to 80,674.62 pesetas. There was thus a credit balance of 2,129.96 pesetas which was distributed among the supplying members in proportion to the total quantity of milk each of them had contributed.

In conclusion we give some data as to the detailed distribution of the dairy's receipts, month by month.

1916	Receipts (pesetas)						Total
	complete milk	skim milk	butter	cheese	cream	vessels and various	
April	3,163.38	—	319	210	167	52	3,911.38
May	4,397.05	102.20	370	96	104	21	5,090.25
June	7,081.30	118.25	730	77	180	—	8,186.55
July	5,153.63	89.30	642	295	128	8	6,315.93
August	5,772.85	111.50	727	370	13	1	6,995.35
September	6,757.85	86.65	832	298	137	39	8,150.50
October	10,054.80	152.75	1,071	59	9	33	11,379.55
November	12,381.98	215.15	1,663	—	217	39	14,516.13
December	14,636.52	386.60	2,032	—	133	1,070.82	18,258.94
Total . . .	69,399.36	1,262.40	8,386	1,405	1,088	1,263.82	82,804.58

(1) 1 peseta = 8d. at par.

UNION OF SOUTH AFRICA.

THE LAND BANK OF SOUTH AFRICA IN 1916. — *Report for the Year ended 31st December 1916*, presented to both Houses of Parliament. Capetown, 1917.

The activity of the Land Bank of South Africa in 1916 was influenced by general conditions determined by the war and by certain legislation which affected its operations.

On 13 June 1916 the Land Bank Act of 1912, under which the bank was formed, was amended by a new Act of which the following are the essential provisions.

“Notwithstanding anything to the contrary contained in any law in force in the Cape of Good Hope and Natal relating to joint stock companies, it shall be lawful for a society consisting of any number of persons to be formed, without registration under such law if *a*) it is formed for the purpose of promoting agriculture or any agricultural or rural industry in the Union; and *b*) all the members are *bona fide* farmers residing in the Union; and *c*) all the members have by agreement undertaken to be liable severally and in *solidum* for the debts of the society; and *d*) the objects and articles of association are approved of by the board and are lodged with the bank; and a society so formed shall be known as a Co-operative Agricultural Society and shall, for the purpose of the principal Act (i. e. the Land Bank Act of 1912) enjoy the same rights and privileges and be subject to the same obligations as a co-operative society enjoys and is subject to, under the principal Act, and the articles of association and any alteration thereof, when approved by the board and lodged with the bank, shall be binding upon the society and its members.

“In the event of the cancellation or abandonment of any lease, license or allotment from the Crown in respect whereof an advance has, with the consent of the Minister of Lands, been made by the bank, for the purpose of erecting a fence or constructing a dipping tank, there shall, when such land is resumed by the Crown or abandoned by the lessee, licensee or lottee, be paid out of the Consolidated Revenue Fund to the bank so much of the advance (and of the interest due thereon) as the bank is unable to recover from the holder of such lease, license or allotment.

“Any holding in respect of which a note has been made under the provision of the Dipping Tanks Advances Act 1911 (Act No. 20 of 1911) or of the Fencing Act 1912 (Act No. 17 of 1912), may, after payment of all instalments and interest then due to the bank in respect of that holding and with the consent of the board, be ceded or transferred by the owner to any other person; but in that case such holding shall, notwithstanding such cession or transfer, continue to be subject to a first charge, created by such note in favour of the bank, for so much of the advance and interest as is unpaid at the date of the cession or transfer; and the owner for the

time being of such holding shall be liable for the payment of any instalments and interest in respect of the advance, as and when they fall due in the same manner as if the advance had originally been made to him.

"Whenever under the provision of the Dipping Tanks Advances Act, 1911, and Fencing Act, 1912, aforesaid, any advance is made by the bank, the same or any balance thereof which may be transferred in terms of the last preceding section, shall be noted free of charge by the Registrar of Deeds, on the deed of transfer, grant, certificate of title, lease, license or allotment of the holding in respect of which such advance is made, in addition to the note which the Registrar of Deeds is required to make in his registers.

"No advances approved by the board, in respect of the erection of a fence or the construction of a dipping tank, shall be paid over to the person to whom the advance is to be made until the board is satisfied that the fence or tank, as the case may be, has been erected or constructed: Provided that if the holding be mortgaged upon which the dipping tank is to be constructed or the fencing erected, as the case may be, the board, upon receipt of the application, shall give written notice to the registered holder of such mortgage of its intention to grant the advance.

"Notwithstanding anything to the contrary in the principal Act contained, a farmer resident in such areas as have, under the Drought and Flood Distress Relief Act 1916, been declared by the Governor General by proclamation in the Gazette, may, notwithstanding that his property is hypothecated under a mortgage bond, apply to the board for an advance upon second mortgage of land within such area. The board shall, upon receipt of such application, refer it for investigation and report to a local committee... The board after consideration of the committee's report may... make an advance not exceeding five hundred pounds upon second mortgage of the land... Advances made under this section shall bear interest at the rate of five per cent. per annum and shall, together with interest at that rate, be, within a period not exceeding two years from the date of the advance, repayable on such terms and conditions as the board may prescribe."

In 1916 eighty-six applications for advances of this description, amounting together to £30,430, were received. Fifty-eight for a total sum of £17,800 were granted, repayable in three biennial instalments of which the first falls due at the end of the first year. Twenty-two applications for advances aggregating £8,180 were refused.

The enormous rise in the price of fencing material entailed a considerable decrease in the loans for enabling the fencing of properties in conformity with the Act of 1912. In 1913 the bank received 906 applications of loans amounting to £132,998; in 1914 it received 677 for £86,685; and in 1915 it received 132 for £14,746. In 1916 it received only 97 for the total sum of £9,336; and only 70 of these, for the total sum of £6,153, were approved. These loans ought to allow 202 miles of fencing to be constructed in the territory of the Union at an average cost of £30 a mile. In 1916 the total sum paid by the bank for fencing was £12,032.

The war seems on the other hand not to have affected the construction of dipping tanks, doubtless because the materials for these are found within the country and their price has not therefore risen perceptibly. In the year considered 231 applications for loans amounting to £20,615 were received by the bank, but only 175 of them, for the total sum of £15,299, were ratified. This sum represents an average loan of £87 per tank. The total amount paid out in 1916 in loans of this description was £25,370.

On 31 December 1916 the co-operative societies owed to the bank a total sum of £354,729. During 1916 they applied in all for the loan of £71,500 of which £63,600 were granted. Credit operations on current account effected in 1916 were satisfactory: the total sum paid out under this head was £156,284; that received was £146,203. The maximum debt of the year — £250,970 — was owed on 31 December. This sum was covered to the extent of £196,703 by the agricultural products and implements held by the society. The remainder, namely £54,267, represents approximately the sum used by the co-operative societies to supply their members with the merchandise and products necessary to agriculture. The figures already given show that disbursements and receipts approximately balance, a reassuring circumstance which shows that the co-operative societies have thoroughly understood the aim of operations of this kind. The interest falling due on 31 December 1916 on credit on current account, amounting to £6,462, was also paid punctually and entirely. The same is true of the annuities falling due on long-term loans previously granted. In order to make more solid the credit needed by the farmers, the board grants the co-operative societies loans from which to make their members advances on the maize harvest, sold by the medium of the societies. In 1914 and 1915 advances of 7s. 6d. a sack were paid to members, and the products of the sale allowed further payments of 2s. and 2s. 6d. to be made. Difficulty has however been found in convincing both those managing the societies and the farmers themselves that the amount of an advance should not exceed the approximate costs of production, and that the final settlement should be made only after the sale.

In 1916 the maximum advance, at first fixed at 7s. 6d., was raised first to 8s and then to 9s. 6d. a sack, in order to lessen the temptation to members to sell their maize directly to purchasers who offered an average price of 10s. a sack. It is interesting to notice that farmers who remained faithful to their engagements to the co-operative societies realized a larger profit, for they finally received about 12s. 6d. a sack. One society attained to 13s. 7d.

The following figures show the total turnovers of the societies in 1915 and 1916.

	1915	1916
Sale of agricultural products	£ 566,470	454,415
Materials necessary to agriculture, including sacks	127,903	144,365
Total	£ 694,373	598,780

The decreased sales of 1916 are due to the less abundant harvest.

In 1916 the societies realized £359,060 by sales on the spot, £95,355 by exporting.

The Act of 1912, under which the Land Bank was formed, allowed it to grant loans to co-operative societies on condition the members were, under the Act, collectively liable for the debts of their respective societies. As laws on co-operation existed only in the Transvaal and Orange Free State the bank could not help farmers of the Cape or Natal who wished to form co-operative societies. This anomaly was eliminated by the Act of 1916 from which we have already quoted and which had force from 15 June 1916. Its provisions have aroused a most lively interest in the farming classes of these two provinces of the Union. Hitherto however only two co-operative societies have been constituted within them.

The bank has observed that hitherto co-operation in Transvaal has not affected the sale of grain, which presents the greatest difficulties, and therefore it makes a point of encouraging the formation of small societies of a different kind which do not entail large general costs nor the immobilization of a large capital. Thus at Ennersdale in Natal a society for breeding milch cows, the first of its kind in the Union, was founded. It aims at enabling its members to procure good milch cows. The number of members is limited to ten, and no member may be supplied with stock to the value of more than £300. The price of the cows is repaid by monthly instalments, uniform in amount, extending over a period of five years, and secured by the obligation imposed on the members to sell all their cream by the medium of the society, which every month deducts the quota of repayment due from the sum realized by the cream. The amount thus deducted is paid to the bank every month. The society has the right to defer the liquidation of reimbursement when those interested have paid about £50 of the value of the stock furnished to them, in order that all may acquire absolute property in the stock at the same time. This form of organization seems to give good results, and it is found that costs of administration are gradually eliminated.

Another society, also founded at Ennersdale, enables its members to buy manures and sacks. The members are of course bound to sell their products by the medium of the society.

Some efforts have also been made to develop co-operation with a view to colonization.

Since the financial resources placed at the outset at the bank's disposal were gradually exhausted, application was made to the Treasury of the Union for a sum of £775,000, in order to allow the ends for which the bank was constituted to be further pursued. It became clear, especially after the European war had broken out, that agriculture would be the Union's chief source of wealth ; and that if farmers were able to produce live stock and grain in large quantities the profit to the whole country would be immense. The increase of production is conditioned almost exclusively by the amount of capital available for agriculture, and such capital is furnished on good terms by the Land Bank, which is thus the principal agent of agricultural development in the Union of South Africa.

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Part II: Insurance and Thrift

RUSSIA.

THE BUSINESS DONE BY FINNISH MUTUAL SOCIETIES FOR INSURANCE AGAINST FIRE AND MORTALITY AMONG LIVE STOCK.

OFFICIAL SOURCE:

RAPPORT SUR L'ÉTAT DES ASSOCIATIONS DE BAILLAGE ET DE PAROISSES POUR L'ASSURANCE CONTRE L'INCENDIE ET CONTRE LA MORTALITÉ DES BESTIAUX DANS L'ANNÉE 1914 (*Report on the State of Leasing and Parochial Associations for Insurance against Fire and Mortality among Live Stock in 1914*) Finlands Officielle Statistik. Helsingfors 1916.

§ 1. SOCIETIES INSURING AGAINST FIRE.

The number of societies for mutual insurance against fire having a sphere of activity less in extent than a government was 283 in 1914 as against 287 in 1910 and 265 in 1895. The societies were distributed as follows among the various governments: Nyland 11, Abo and Björneborg 42, Tavastehus 10, Viborg 50, St. Michel 23, Kuopio 30, Vasa 73, Uleåborg 44. The total value insured by these societies was 984,345,554 francs at the end of 1913 and 1,037,355,912 francs at the end of 1914.

At the end of 1914 the value of the insured property in Finland reached about 4,398,000,000 francs without taking into account reinsurance effected by other societies. The following figures show the distribution of insured sums among the various groups of societies. In order that the development may be more clearly perceived the data referring to 1897, 1900, 1905 and 1910 are given.

TABLE I. — *Value insured at the end of certain years.*

	1897	1900	1905	1910	1914
	frcs	frcs	frcs	frcs	frcs
Large mutual societies.	539,256,206	659,952,105	1,087,648,105	1,618,884,087	2,025,175,034
Leasing and parochial societies . . .	352,511,270	436,737,520	569,006,331	778,737,748	1,037,355,912
Finnish stock companies	261,365,311	395,246,061	385,769,915	598,582,310	816,517,268
Foreign " "	190,697,825	248,403,933	219,171,739	269,796,891	254,000,000
Russian " "	160,000,000	170,000,000	160,000,000	245,000,000	265,000,000
Total . . .	1,503,830,612	1,910,339,619	2,421,596,090	3,511,001,036	4,398,048,214

From these figures it follows that the leasing and parochial mutual societies possessed at the end of the years cited the following total amounts of insurance :

<u>1897</u>	<u>1900</u>	<u>1905</u>	<u>1910</u>	<u>1914</u>
23.4 %	22.9 %	23.5 %	22.2 %	23.6 %

As regards the distribution of insured values according to their objects by these societies, data furnished by the associations have allowed it to be ascertained that the value of the insurances of real estate represents 68.1 per cent. and that of the insurance of chattels 31.9 per cent. of the total insured value.

The total number of policies was 333,769 at the end of 1914. During this year there was an increase of 12,826 policies. The average for the whole country of the amount covered by a policy was 3,108 francs.

In the year considered there were 2165 fires and the indemnities paid amounted to 1,582,140 francs. Of this sum 1,103,554 francs were paid for losses to real estate and 478,587 francs for those to chattels, that is 69.7 and 30.3, respectively, of the total indemnities paid in the year.

The following table shows the annual number of fires and the losses per million francs of the average amount of a year's insurances.

TABLE II. -- *Number of Fires and Amounts of Damage incurred.*

Year —	Number of fires —	Value of damage per million francs insured — (annual average)
1897	1,220	3.7
1898	1,165	3.3
1899	1,247	3.2
1900	1,282	3.1
1901	1,480	3.4
1902	1,414	3.0
1903	1,304	2.7
1904	1,435	2.8
1905	1,449	2.7
1906	1,512	2.6
1907	1,345	2.2
1908	1,680	2.6
1909	1,547	2.2
1910	1,560	2.07
1911	1,625	1.97
1912	1,762	1.96
1913	1,899	1.98
1914	2,165	2.14

The number of fires per thousand policies was 6.6 in 1914. The fires were distributed as follows according to months :

January	7.8 %	July	11.4 %
February	4.7 "	August	8.9 "
March	5.1 "	September	10.2 "
April	9.1 "	October	9.1 "
May	10.9 "	November	7.0 "
June	9.5 "	December	6.3 "

The following table shows the causes of fires in 1914 :

TABLE III. — *Causes of fires.*

Causes of fires	Number of fires	%
Lightning	108	5.0
Explosion	1	0.05
Spontaneous combustion	15	0.7
Fireplaces in a bad state	243	11.2
Chimney fires	117	5.4
Hot cinders	60	2.8
Carelessness of smokers	37	1.7
Carelessness as to fires	275	12.7
Carelessness in the use of lamps and combustible oils	54	2.5
Careless use of matches	83	3.8
Other carelessness	213	9.9
Arson	31	1.4
Other causes	318	14.7
Unknown cause	610	28.2
	2,165	100.0

The insurance value of the property destroyed by incendiary crimes was 63,226 francs.

For every thousand francs of the average annual amount of insurances the amount of losses was 1.56 francs as against 1.62 in 1897, 1.28 in 1900, 1.26 in 1905, 1.36 in 1910 and 1.23 in 1913.

The premium fixed for 1914 was in relation to the amount of the premiums at the end of the year 1.84 francs for a thousand francs, as against an average of 1.64 per thousand for the period from 1897 to 1910.

The amount of the premiums received in 1914 was 2,064,791 francs, employed as follows:

indemnities	1,607,076	frs.	
" share of reinsurers . . .	106,503	"	1,500,573 frs.
costs of administration	237,516	"	
premiums paid to reinsurers	105,426	"	
apparatus against fire,	22,711	"	
other expenses	70,423	"	
Total . . .	1,936,649	"	
Surplus in hand . . .	128,142	"	

If there be added to this surplus interest and other small receipts, which in 1914 amounted to 343,912 francs, a total surplus is obtained of 472,054 francs as the increase in the sum which all the societies have in hand.

If the indemnities, the cost of administration and the other expenses incurred during the year by the leasing and parochial societies be compared with the capital insured at the end of the year, it is found that for every 1000 francs of capital insured in 1914 the indemnities amounted to 1.41 francs and the costs of administration to 0.21 francs. The latter item is sufficiently low, owing to the fact that an important share of the administration of these societies is undertaken by the communes, and that the part of the costs which constitutes the pay of the experts etc. is oftenest paid directly by the interested person, without passing through the hands of the society, so that it does not figure in the accounts.

The following table shows the total sum of the premiums received in 1914 by the various groups of insurance societies in Finland, and the sum of the indemnities and the costs of administration in the same year.

TABLE IV. — *Premium, indemnities and costs of administration.*

	Premiums	Indemnities	Costs of administration
Large mutual societies	4,873,360 frs.	2,738,872 frs.	891,413 frs.
Leasing and parochial societies	2,064,791 "	1,607,076 "	237,516 "
Finnish stock companies	2,946,644 "	1,319,383 "	562,672 "
Foreign stock companies	882,281 "	511,702 "	139,266 "
Total . . .	10,767,076 frs.	6,167,033 frs.	1,830,866 frs.

The amount of insurance was distributed as follows in 1914 among the societies :

less than 0.5 million francs	7 societies
from 0.5 to 1 " "	29 "
from 1 to 2 " "	70 "
from 2 to 5 " "	128 "
from 5 to 10 " "	38 "
from 10 to 20 " "	7 "
more than 20 " "	44 "
Total . . .	283 societies

Of the total number of societies active at the end of 1914 the insurance of 12.7 per cent. amounted to less than a million francs, that of 79 per cent. was between one and five millions, that of 13.4 per cent. between five and ten millions, that of 3.9 per cent. more than ten millions. At the end of 1896 the corresponding figures were, respectively, 55.5 per cent., 41.7 per cent., 2.0 and 0.8 per cent. Thus in the eighteen years considered the average total amount of insurance increased and there was a noticeable movement towards the higher groups. The average capital insured by all these societies increased from 1,306,000 to 3,665,000 francs in the same period. A considerable number of them however are still not solidly founded. The total amount of their resources at the end of 1914 was 7,162,000 francs.

Generally speaking, however, the position of these societies slightly improved between 1897 and 1914. The following is the average amount of their resources per thousand francs of insured capital.

1897	1900	1905	1910	1914
2.40 francs	3.56 francs	4.90 francs	5.84 francs	6.74 francs

These resources were however very unequally distributed among the mutual societies. To give an idea of them the societies have been grouped in the following table according to the amount of their resources at the end of 1914, their engagements being deducted. The figures show the number of societies belonging to each group :

		Liabilities in excess of resources	12
		Without resources or liabilities	1
Surplus of resources	}	less than 1000 francs	1
		from 1,000 to 5,000 francs	55
		" 5,000 " 10,000 "	48
		" 10,000 " 50,000 "	132
		more than 50,000 "	34
		Total . . .	283

Most of the societies in the first three of these groups live from day to day, unable to foresee every year the sum which will cover the year's expenses. Thus a surplus or deficit of from ten to a hundred francs easily occurs.

§ 2. MUTUAL SOCIETIES FOR INSURING LIVE STOCK.

The following data refer to mutual societies for the insurance of live stock having a sphere of activity less than the territory of a government. There were 125 of these at the end of 1914, distributed as follows among the various governments: Nyland 6; Abo and Björneborg 8; Tavastehus 3; Viborg 26; St. Michel 5; Kuopio 5; Vasa 59; Uleåborg 13.

The total sum insured at the end of 1914 was made up as follows:

horses	34,181	total insured value	12,090,842	francs .
horned cattle . . .	42,685	" " "	5,008,672	"
small live stock . .	—	" " "	20,733	"
				<hr/>
Total . . .			17,120,247	"

If to these figures be added those of the four societies operating over the whole country the insurance of live stock in the whole country at the date mentioned was as follows:

horses	62,004	total insured value	23,197,687	francs
horned cattle . . .	60,461	" " "	7,699,752	"
small live stock . .	—	" " "	20,733	"
				<hr/>
				30,918,172 . "

The number of insured horses represents 20.9 per cent. of the total number of horses, that of insured cattle 5.1 per cent of the total number of cattle.

As regards the amount of their insurance these societies may be grouped as follows:

TABLE V. — *Groups of mutual societies insuring live stock.*

Year	Amount of insurance									
	less than 50,000 francs		from 50,000 to 100,000 francs		from 100,000 to 200,000 francs		from 200,000 to 500,000 francs		500,000 francs and more	
	Number	%	Number	%	Number	%	Number	%	Number	%
1905 . . .	10	17.9	13	23.2	19	33.9	11	19.6	3	5.4
1906 . . .	18	23.7	17	22.4	27	35.5	12	15.8	2	2.6
1907 . . .	14	17.5	19	23.8	32	40.0	13	16.2	2	2.5
1908 . . .	16	18.8	17	20.0	31	36.5	19	22.4	2	2.3
1909 . . .	16	17.5	17	18.7	35	38.5	20	22.0	3	3.3
1910 . . .	22	22.0	22	22.0	30	30.0	23	23.0	3	3.0
1911 . . .	22	21.0	25	23.8	35	33.3	20	19.0	3	2.9
1912 . . .	25	22.5	27	24.3	37	33.4	19	17.1	3	2.7
1913 . . .	27	22.3	33	27.3	38	31.4	20	16.5	3	2.5
1914 . . .	30	24.0	29	23.2	41	32.8	22	17.6	3	2.4

The percentage of accidents was 2.07 in the case of the insured horses and 1.45 in that of the insured cattle. In the former case indemnities amounted to 1.27 per cent. and in the latter to 1.04 per cent. of the total insured value.

The average indemnity paid was 213.27 francs for a horse, 81.89 francs for a horned animal.

The following table gives the data in this respect for eleven years, the only years for which statistics have been established :

TABLE VI. — *Mutual insurance of live stock 1904-1914.*

Year	Accidents %		Indemnity per 100 francs insured		Indemnity per accident	
	Horses	Cattle	Horses	Cattle	Horses	Cattle
	%	%	francs	francs	francs	francs
1904	1.67	1.68	1.10	1.00	230.03	55.43
1905	1.77	1.94	0.96	1.08	212.53	52.68
1906	1.60	1.86	1.11	1.18	229.73	55.96
1907	1.63	1.45	0.97	1.00	195.64	62.25
1908	1.65	1.19	1.11	0.87	224.69	68.21
1909	1.74	1.46	1.16	1.00	226.70	65.20
1910	2.03	1.26	1.20	0.93	204.80	71.30
1911	2.31	1.25	1.68	0.97	299.22	76.56
1912	2.21	1.52	1.37	1.06	214.05	71.08
1913	1.94	1.33	1.26	1.00	225.49	80.65
1914	2.07	1.45	1.25	1.04	213.12	81.89

The premiums received in 1914 were as follows :

For insurance of horses only	115,030	frances
" " " cattle "	23,444	"
" reserve fund	8,311	"
" collective insurance of horses and cattle	104,251	"
	<hr/>	
	251,036	frances

This sum represents 1.40 per cent. of the average amount of the insured value during the year considered. Other receipts, interest, etc. brought the societies 10,715 frances or 0.12 per cent. of the average amount of the insurances. The total receipts amounted therefore to 270,751 frances or 1.60 per cent. of the average amount of the insurances. Of this sum there was spent:

on indemnities	201,104	frances or	1.19	per cent. of the insured value
" costs of administration	26,602	" "	0.17	" " " " " "
" increasing the reserve fund	16,023	" "	0.10	" " " " " "
" other expenses	15,287	" "	0.09	" " " " " "
	<hr/>			
Total	262,015	" "	1.55	" " " " " "

There is therefore an available balance of 8,736 frances.

The costs of administration amounted to 12.2 per cent. and other expenses (costs of organization, interest, etc.) to 6.3 per cent. of the premiums received in the year.

The balance-sheets of the societies show, when engagements have been subtracted, a credit surplus of 116,211 frances or 6.79 frances per thousand frances of the capital insured at the end of the year. As appears these societies have not yet amassed considerable capital.

Part III: Credit

GERMANY.

PRUSSIAN LEGISLATION AS TO THE "RENTENGÜTER" AND ITS RESULTS FROM 1891 TO 1914.

SOURCES:

STATISTISCHE KORRESPONDENZ, Berlin, 1915.

DARMSTÄDTER (Dr. F.): *Die Entstehung der Rentengutgesetzgebung (The Origin of the Legislation as to the Rentengüter)*, Berlin, 1915.

The first attempts at Prussian colonization go back to the first half of the nineteenth century. In 1835 Von Landenburg, the chief of the domain, divided into parcels and sold two domains in the district of Grimmen. The purchase price was paid in cash or by redemption in thirty years. In the following years, from 1840 to 1852, the Prussian State parcelled and sold to the peasants twenty-seven domains, but the conditions of purchase were less favourable than the earlier ones to the buyers who were obliged to pay one fourth of the price in cash and the remainder within a period of from three to five years. Since 1852 this sale of State property has ceased.

About the middle of the nineteenth century, on 2 March 1850, the *Rentenbanken*, of which the aim was the financial liquidation of feudal agrarian relations, were formed. The business of these banks was as follows: they paid to feudatories in cash the price of lands ceded to the peasants, who were obliged to repay this price to the banks by the method of redemption in thirty years.

In forming these banks the Prussian government hoped that they would also undertake colonization, that is to say buy large properties and resell them to the peasants in parcels. This hope was disappointed: the banks' capital was insufficient for the business of colonization and the delay of thirty years was too short.

The second half of the nineteenth century was marked in Germany by a strong current of emigration and this decided the Prussian government to take up anew the question of colonization. A proposed law was presented to the parliament in 1868; and henceforth until 1891 the matter was

the subject of numerous studies and discussions. In 1891 a law was passed which created *Rentenbanken* of a new type.

This law had been preceded by the colonization law of 26 April 1886 which was however applied only in the two provinces of Posnania and West Prussia. It may be considered as partaking of the character of official instructions as to colonization: it indicates the methods of colonization which it allows and protects, and presents some calculations as to redemption premiums, leaving the contracting parties otherwise free.

On 27 June 1890 it was applied in all the provinces, and on 7 July 1891 the so-called law of the *Rentenbanken* was passed and seemed to decide all questions definitely.

It is the aim of this law that the *Rentenbanken*, helped by State credit, should buy the large landed properties, divide them into parcels of an average area of from five to fifteen hectares (1) and resell these to the peasants.

The following are some details as to the organization and the management of these banks.

1) In each province a *Rentenbank* and a general commission are set up. The latter is the intermediary between the seller and the buyer of land and draws up the plan for subdivision; the former undertakes the financial business, paying the seller and receiving redemption premiums from the colonists.

2) The seller, that is the large proprietor who wishes to sell his land, offers it to the general commission. The latter sends out experts charged to draw up the plan for subdivision and to fix the price for the whole property and the individual parcels.

3) The plan for subdivision, the prices being indicated on it, is sent to the proprietor on whom it is incumbent to find purchasers for the parcels.

4) When these have been found and have declared before the general commission their willingness to buy the parcels at the fixed prices, the seller applies to the bank for the total selling price. In place of cash he receives *Rentenbanken* bonds, guaranteed by the State, and bearing interest at the rates of 3 $\frac{1}{2}$ and 4 per cent.

5) If the property in question be burdened with debts the bank must, before paying the proprietor, and in conformity with the provisions voted in 1909, settle the debts in cash or bonds, and must only give the remainder of the amount fixed by the general commission to the proprietor.

On paying the proprietor the bank itself becomes proprietor of the land, and in such capacity sells the parcels to the colonists. The amount of the purchase price is paid by the latter by the method of redemption in sixty and a half years. Instead of this term the bank may allow terms of fifty-seven and a half and fifty-nine and a half years, in these cases discharging the purchasers from obligation to pay the redemption premium for three or for one years.

The purchasers of parcels are authorized to pay their debts before the

term of sixty and a half year expires. If they do so within less than ten years they must have the permission of the general commission.

6) According to the provisions voted in 1896 and 1900 the bank grants to the purchasers of parcels the credit necessary to allow them to meet the costs of initial installation, building dwellings, improvements, purchase of live stock, etc., and to pay co-heirs. These debts are paid by the method of redemption in a period of from ten to thirty years.

From 1891 to 1914 the Rentenbanken obtained the following results :

	Number of large pro- perties bought by the banks —	Number of colonies formed by the banks —	Total area of colonies — hectares —	Average area of a colony — hectares —
1891-1892	59	392	5,083	13.0
1893	176	1,490	13,296	8.9
1894	239	1,902	21,829	11.5
1895	131	1,237	12,908	10.4
1896	104	1,167	14,177	12.1
1897	93	916	9,990	10.9
1898	73	720	9,164	12.7
1899	54	651	8,046	12.4
1900	44	322	4,297	13.3
1901	49	422	4,714	11.2
1902	59	311	3,645	11.7
1903	67	393	5,400	13.7
1904	64	376	5,242	13.9
1905	103	664	9,778	14.7
1906	109	618	10,049	16.3
1907	173	914	13,417	14.7
1908	662	1,223	12,476	10.2
1909	880	1,554	17,166	11.0
1910	1,014	1,587	12,709	8.0
1911	780	1,328	14,110	10.6
1912	1,493	1,216	12,383	10.2
1913	1,066	1,201	11,398	9.5
1914	1,115	931	7,171	7.7

The data as to the cultivation of the parcels sold to the colonists give us the following facts regarding 1913 :

The land is employed as follows :

3,173	hectares for	buildings and gardens
164,451	" "	fields
40,550	" "	meadows
14,252	" "	forests
8,851	" "	roads etc.

As regards the extent of holdings :

5,073	colonists have	less than 2 ½ hectares
2,728	" "	from 2 ½ to 5 hectares
4,705	" "	" 5 to 10 "
6,339	" "	" 10 to 25 "
1,759	" "	more than 25 hectares.

The following is the distribution according to provinces and area :

Province	less than 2 ½ hectares	from 2 ½ to 5 hectares	from 5 to 10 hectares	from 10 to 25 hectares	more than 25 hectares	Total — hectares
East Prussia	640	462	1,054	1,104	309	3,569
West Prussia	214	532	1,175	1,147	292	3,360
Brandenburg	303	207	158	205	42	815
Pomerania	321	244	777	2,512	352	4,386
Posnanian	943	270	521	518	162	2,404
Silesia	446	509	418	171	58	1,602
Saxony	273	84	78	36	22	493
Schleswig-Holstein . .	356	83	181	401	300	1,321
Hanover	478	85	175	161	20	919
Westphalia	984	338	164	73	27	1,585
Hesse-Nassau	86	13	4	11	5	119
Rhine Province, . . .	29	1	—	—	—	30

Until 1908 parcels could not be of less than two hectares, but the formation of smaller parcels, even those of less than one hectare, has since been allowed. From 1908 to 1913 there were formed :

2,623	parcels of less than 1 hectare
1,162	" " from 1 to 2 ½ hectares

The purchase prices of parcels according to provinces were as follows :

Province	Area — hectares	Total value — marks	Average value per hectare — marks
East Prussia	44,884	37,711,053	840
West Prussia	39,388	26,268,386	667
Brandenburg	6,524	10,834,627	1,661
Pomerania	78,990	96,797,355	1,225
Posnania	17,968	18,831,009	1,048
Silesia	9,914	13,042,479	1,316
Saxony	3,397	8,960,548	2,638
Schleswig-Holstein	20,200	31,905,504	1,579
Hanover	4,871	8,634,028	1,773
Westphalia	4,738	12,817,339	2,705
Hesse-Nassau	392	664,542	695
Rhine Province	11	182,402	26,582

In purchasing large properties for the purpose of subdivision the *Rentenbanken* paid :

in cash	39,860,286	marks
in their bonds	177,831,093	"
in mortgages	15,208,145	"
At the same time the banks granted to the colonists other loans amounting to	19,176,872	"

MISCELLANEOUS INFORMATION RELATING TO CREDIT IN VARIOUS COUNTRIES.

ARGENTINE REPUBLIC.

THE « BANCO EL HOGAR ARGENTINO » IN 1915-1916. — *La Revue économique et financière* Paris, 21 April 1916.

The following is a reproduction of this bank's profit and loss account closed on 31 August 1916:

Debit.

General costs, taxes, rents, miscellaneous.	Fr.	1,509,585
Commissions.	"	12,367
Service of bonds	"	6,229,061
Expenses of bank's property, repairs, taxes insurance, etc.	"	211,281
Reserve expenses in advance	"	134,089
Reserve fund, personal bonds	"	1,320,000
Certificates of participation in accumulated interest.	"	3,092,236
Total	Fr.	12,508,619

Credit.

Interest, fines, premiums, exchange and commissions.	Fr.	20,570,646
Reserve Premiums	"	1,183,600
Letting	"	634,452
Dividends retained and transference duty	"	69,664
Total	Fr.	22,458,362
Amount of debit account	"	12,508,619
Net Profit	Fr.	9,949,743

The report presented by the administrative council to the general meeting of 30 October 1916 shows that the arrest of business obliges the bank to increase considerably the number of its purchases of properties. To avoid irreparable losses the company must wait for a more favourable period for the liquidation in its own interest of its operations.

Mortgage loans reached at the end of the year the sum of 96,327,619 piastres of national money (the piastre is discounted in francs at the fixed exchange of 2.20 francs) ; and the amortization fund, that is the effective value of the certificates of participation assigned to loans, was 15,823,631 piastres. The corresponding figures for 1914-1915 were, respectively, 98,445,457 piastres and 14,389,045 piastres.

The promises of sales amounted to 12,307,816 piastres, with an amortization fund represented by the effective value of the certificates of participation, namely 1,991,086 piastres, as against 15,316,900 piastres and 2,036,141 piastres, respectively, in 1914-1915.

The bank's real estate is represented by the sum of 12,830,854 piastres as against 7,348,357 piastres on 31 August 1915.

"Personal bonds" figure in the account for 616,633 piastres: they represent the liquidation of mortgage loans not covered by the sale of the guaranteeing properties. Although the balance is charged against the debtors the management has thought it useful to form a "reserve fund for personal bonds" into which it has paid a sum of 600,000 piastres.

To resume -- although the auctions of real estate which have been forced upon the company have necessitated a new organization and entailed new cares, it has been possible to maintain the bank in a sufficiently stable position.

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THE BUSINESS OF THE MORTGAGE COMPANY OF THE RIVER PLATE, LTD, IN 1916. — From *The Statist*, Vol. LXXXIX, No. 2,032 London, 3 February 1917.

The report presented to the thirtieth ordinary general meeting of this company in London on 31 January gave interesting information as to mortgage business in the Argentine Republic in 1916.

The country experienced one of the severest droughts on record which wrought serious damage to agricultural and pastoral industries. It lasted from January to November, the rain coming just before the wheat was ready to be cut and therefore too late to affect the yield of wheat materially, although in time to improve the maize which at one period promised very badly. On the pastoral industry the effects of the drought were less serious although anxiety was at one time felt with regard to them. A few months of drought caused a shortage of pasture: the condition of the cattle began to deteriorate and there was considerable mortality among them. Fortunately the drought broke before these losses had assumed large proportions and apprehensions as to a serious loss of breeding cattle were allayed. The wool clip was good and fetched record prices. The export of Argentine meat exceeded all previous records owing to the demands of the armies in the field, and the farmers obtained very good prices for the stock they sold to freezing companies.

The company's profits were within £100 of their amount in 1915, a most satisfactory result since both the agricultural and the pastoral industries

were prosperous in 1915 and very much the reverse in 1916. If clients suffered from diminished earnings they were at least able to meet their liabilities with fair punctuality, being helped by their exceptional profits of the previous year. Mortgage loans were reduced by £68,000 and the money thus released was invested in British government securities. The properties taken over under foreclosure were slightly less than in the previous year, representing only £2,381 or about $\frac{1}{5}$ per cent. of the outstanding loans. Investments, under the general heading of British government securities, appeared in the balance-sheet as £170,105, their estimated value on 31 December 1916. The profit and loss account showed that the gross revenue was £131,777 or rather more than £1,000 in excess of that of the previous year. After the expenses, the interest debenture stock, etc. had been deducted and £5,000 set on one side towards the depreciation of investments, there remained a net profit for the year of £68,630 — much the same as that for 1915. For 1915 after £20,000 had been placed in the reserve a dividend of 18 per cent. had been paid. This year a bonus of 2 per cent, which would bring the total dividend paid on the ordinary share capital up to 20 per cent., was recommended.

CHINA.

THE FUNCTIONS OF THE AGRICULTURAL AND INDUSTRIAL BANKS. — *Chung-Fu Kung Pao* (Official Journal) No. 1231, 12 October 1915.

The law as to the agricultural and industrial banks is dated 8 October 1915 and became active on the 12th of the same month.

This law defines these banks as limited liability stock companies aiming at providing the credit necessary to agricultural and industrial enterprises. The minimum sum of the capital shares is fixed at 100,000 *yuän* (1) and the minimum value of an individual share at 10 *yuän*.

Even if the fixed capital of the agricultural and industrial banks has not been entirely covered they must be inspected, as soon as at least half of it has been paid up, by the competent authorities, who will make certain that the founders and shareholders are really honest persons disposing of sufficient capital and capable of belonging to a company. The same authorities will take note of the amount of the capital already paid up, and the application for foundation will then be transmitted to the Ministry of Finances which may or may not give authority for the bank to become active.

Each agricultural and industrial bank will have the territory of a *hsien* as its sphere of action. There may be only one bank in each such territory. If however there are special local conditions the competent authorities may send to the Ministry of Finances a request for the division

(1) 1 *yuän* is a piece of fine silver weighing 414. 51282 grains (troy).

of a *hsien* into two territories at most, or for the union of two *hsien* into a single banking territory.

The shareholders of these banks must be recruited in the first place among the persons born in their respective *hsien*, living in them or possessing property in them. If the number of shareholders of this description be insufficient others may be recruited outside the bank's territorial sphere until the fixed number has been reached. Corporations within a bank's territory may become shareholders in it. The share certificates of the agricultural and industrial banks are all nominative and their sale to persons who are not Chinese citizens is forbidden.

The following classes of operations may be effected by the agricultural and industrial banks: 1) mortgage loans repayable by instalments graduated over a period of five years; 2) mortgage loans repayable at a fixed date, namely at the expiry of a term of three years; 3) loans on pledged and imperishable agricultural products, to be repaid at the end of a year or by instalments graduated over a year; 4) loans on the pledged products of fishing when the borrower has an exclusive fishing right, to be repaid in a year or by instalments graduated over a year — a supplementary pledge of public securities or an additional mortgage may be exacted by the bank as a guarantee of these loans; 5) loans on pledged titles to provincial or central government loans or on shares in commercial companies, repayable at the end of a year or by instalments graduated over a year; 6) loans repayable at the end of three years and not guaranteed by a mortgage, being granted to groups of at least ten agriculturists or industrial workers who are completely solvent; 7) loans not guaranteed by a mortgage, granted with the authority of the competent local official to local corporations in enjoyment of certain and easily realized profits.

These loans may be granted only for the following objects:

1) the improvement of uncultivated lands and crops in general; 2) irrigation and reforestation; 3) purchase of seeds and manures and all kinds of primary materials used in agriculture and industry; 4) storage of and traffic in agricultural and industrial products; 5) purchase and repair of machines, implements and live stock useful to agriculture and industry; 6) construction and repair of buildings for agricultural and industrial purposes; 7) purchase of live stock with a view to the improvement of breeding; 8) purchase of silkworm eggs, young fish and instruments of all kinds for the development of sericulture and pisciculture; 9) all works aiming at the development of agriculture and industry.

If the real estate to which these provisions refer be not already registered and insured the agricultural and industrial banks cannot accept mortgages of it as security for loans. The amount of a loan made by the bank must not exceed two thirds of the value of the mortgaged property, the value as estimated by the lending bank being taken as basis.

Only first mortgages are accepted as security and mortgaged real estate must be productive. If the value of mortgaged property diminish after it has been estimated the bank may require a supplementary estimate, and may, if the borrower do not fulfil such requirement, proceed

to liquidate the debt at a fixed date, or immediately exact full repayment of the loan even if the term for which it was made have not expired. The bank may similarly exact repayment at a date fixed by itself if the borrower do not assign the loan to the object for which it was made, or if circumstances have caused a modification of its employment.

The agricultural and industrial banks may apply to the Ministry of Finances for authority to issue bonds. The total sum of their issues may not exceed the total sum of their loans nor be more than twice the sum of their paid-up capital. Bonds are normally payable to bearer but may be nominative, and the minimum value of one is fixed at five yuän. They bear interest and may be repaid with an additional premium. The amount of the bonds repaid each year must not be less than the total sum of the loans repaid to the bank in the same year.

In drawing up their annual balance-sheet the agricultural and industrial banks must deduct from the amount of the net profits a sum equivalent to not less than a tenth of such amount, in order to constitute a reserve fund with which to cover eventual losses and ensure an average dividend on shares. The reserve fund may not be used without the preliminary authority of the Ministry of Finances, applications to draw on it backed by a statement of reasons being transmitted to this ministry by the medium of the competent authorities.

These banks are placed under the control of the Ministry of Finances and the authorities within whose jurisdiction they find themselves. The local representative of the central government in the various provinces may also make enquiries as to their situation.

The authorities exercising control may order an agricultural and industrial bank to present a written report on the situation of its affairs. They may also verify the information in the bank's books or any other document as to the sums and the bonds which the bank has in hand. Subsequently they must draw up a confidential report to the competent authorities which these will transmit to the Ministry of Finances. The controlling authorities may attend meetings and express opinions at them, without however having the right to vote.

The Ministry of Finances or the competent authorities may, when they think necessary, limit the concession of loans as well as any other business undertaken by the agricultural and industrial banks.

The agricultural and industrial banks fix the maximum rate of interest on their operations.

Part IV: Agricultural Economy in General

BRITISH INDIA.

LAND TENURES IN THE PANJAB IN THEIR ORIGINAL FORM AND AS AFFECTED BY BRITISH RULE.

by J. M. DOUTE.

There is no more interesting subject of historical investigation than the effect which two civilizations, brought by circumstances into intimate relations, have one on the other. This is so even when both belong to the same family of nations, and what occurs is a peaceful penetration of ideas and an exchange of the fruits of scientific enquiry. But when one nation has imposed its rule on races covering vast expanses of the world's surface and the most various degrees of culture the investigation becomes still more absorbing. This is what happened in the case of the Roman Empire 2000 years ago, and has happened as regards the British Indian Empire in the past 150 years. In the case of both Empires the rulers looked with the most tolerant eye on the native institutions of their subjects, but inevitably they exercised upon them, often unconsciously or even against their will, a profound influence.

No race is fit to control the destinies of an alien people unless it itself possesses a political instinct leading it to abstain from intermeddling as a Government with the religious and social life of its subjects. On the whole the British in India succeeded in avoiding all direct interference in such matters. Even widow-burning was only forbidden after long delay and hesitation. In conquered territory the English planted their cantonments, and sooner or later their own law-courts, and promulgated their own criminal code. But as regards civil law they maintained the Hindu and Muhammadan codes to govern the most intimate and important relations of life, supplementing them in matters such as business contracts by maxims drawn from English law. In the Panjab politic compliance and disregard for uniformity were pushed still further. Finding that domestic relations and the tenure of land were governed by village customs, probably older than, and certainly inconsistent with, the legal dicta of Hindu Brahmans and Muhammadan Kazis, they accepted the former as it stood, and in time took steps to have it accurately recorded. The

curious result has been that they have acquiesced in a system whereby one rule of inheritance may be applied in one village and another next door.

The settlement officers put in charge of the assessment of the land revenue of the different districts were given the still more important task of deciding and recording the title under which every field in the country was held and tilled. Their business was to register the rights and obligations of individuals and communities as they actually existed.

Thus it would seem that every care had been taken to preserve the framework of land tenure as it stood. The foundation on which that had always rested was that the holding is the property of the family, and not of the individual. That fact is written large in the early records of rights, where the undivided family holding is very prominent. Settlement officers also fully recognized the communal framework of village life; in fact, as we shall see, they assumed its existence even in parts of the Panjab, where it had no reality. But the rapid material development following on the enforcement of order and the fixing of a reasonable land revenue demand for a term of years, combined with the influence of Western ideas in the sphere of political economy and the practical working of English courts of law, shook and nearly destroyed the land system. A communal village organization and a land tenure which had withstood the political storms of centuries threatened to succumb to "the cancers of a long peace".

Ownership of land in the English sense does not exist, and never did exist, in the Panjab. The powers of the actual holder are limited by the title of the State to a share of the produce and by the right of the family to restrain him from any action which would without necessity involve the loss of its patrimony. Subject to these restrictions he has full powers of management and disposes of the produce at his pleasure. Before British rule the Raja or Chief often realized the "ruler's share" in kind, and what was left to the tiller of the soil was usually a bare subsistence. An old family, which had a claim to ownership but did not actually cultivate or arrange for cultivation, might be allowed a petty share of the harvest, say $\frac{1}{40}$ th, while the ruler took $\frac{1}{4}$ th, $\frac{1}{3}$ rd, or $\frac{1}{2}$. Over the waste the State asserted extensive rights, and, even when it was included in village boundaries, did not hesitate to plant on it new settlers, on the plea that it was more than the old village required for pasturage. The predecessors of British rulers did not trouble their heads with theory, being occupied with the practical problem of filling their coffers. But the easiest way to define the relations between native rulers and landholders in the Panjab is to look on the State as superior landlord, and the actual holders as entitled to keep the land they tilled and graze their cattle in the surrounding waste, so long as they paid the customary rent to the Government. It is hardly worth while to discuss the question whether the landholder had a right of alienation. Sales did occur, but generally speaking the demand of the State left nothing of value to transfer. Rent only emerged when the British Government reduced the share in kind into a cash payment fixed for

a term of years, and in the interval left to the landholder the full benefit of any extensions of cultivation or improvements which he might effect.

The limitations which the near agnates of a landholder could impose on his freedom of action are equally clear. From the first a statement of village customs was included in the record of rights of every estate, and these documents furnish valuable evidence of the restricted nature of the tenure. It became still clearer when some twenty-five years after annexation settlement officers were ordered to draw up statements of tribal customs in every district in which a revision of the land revenue assessment was undertaken. Of course custom varied, but the typical case was shown to be that inheritance was confined to sons and, failing sons, to male agnates, to the exclusion of daughters and their offspring, because by marriage the daughter passes into another family. The landholder had no power to interfere by gift or will with the rule of descent, or even to give one son a larger share than another. The sonless man could not rob his near agnates by adopting an heir. If he adopted at all, he was bound to choose one of them.

The early records of village custom were drawn up when sales and mortgages were still very rare. A usual entry is — "Hitherto there have been no sales or mortgages in this village. But, if at any future time a proprietor should wish to sell or mortgage in order to pay the Government revenue or provide for his own necessities, he must first offer it to his near agnates". This right of pre-emption as a means of preventing the intrusion of strangers into the village community was recognised in the earliest Panjab Code of Law. Curiously enough the later tribal records do not deal directly with the all important question of the power of transfer by sale or mortgage. By the time they were made the increased value of land had made it an object of desire to outsiders, and the action of the courts had largely invalidated the customary restrictions on alienation.

The first settlement officers in the eastern and central districts found groups of landholders organized in village communities. They were familiar with the type from experience gained in an adjoining province, and this saved them from making mistakes. In a small village all the landholders would be found to be of one tribe and to claim descent from a common ancestor, in a large one groups of the same or of different tribes occupied separate wards. The shares of the different wards, and of individual landholders within the wards, at least in the common waste, were usually based on relationship real or assumed. Each ward might hold its share of the cultivated land in a single block or in several parcels. The individual landholder as a rule had scattered fields so as to give him a share of the manured land near the village site and of the various kinds of soil in the outlying area. A great feature was the waste held in definite shares, but of which the enjoyment was common. There seems to have been no limitation of user. Every man put in as many cattle as he chose, and, if he had the means, broke up suitable patches of land. The tiller of common land acquired no title. He merely had a right to retain on partition so much as was not in excess of his share. British revenue law has emphasized the joint responsibility of members of the village community for pay-

ment of the land revenue, but its enforcement in actual practice is extremely rare.

Living with the group of landholders were artisans and menials following hereditary occupations for the benefit of the community. Their services were defined, and were paid for by a definite share of the produce at harvest time. All, landholders and dependents, had their houses crowded together on a common site, the impure leather workers and scavengers being settled on the outskirts or in separate sites close to the main village. Lastly there was a common fund for village expenses, and disputes within the brotherhood were settled by a village council.

In the hill country in the north of the Panjab the conditions were wholly different. The Rajas were universal landlords in a far stronger sense than in the plains. Each holder held his parcel of land in virtue of a deed of grant given by the ruler to himself or to his ancestor. He built his house on his own allotment, and the individuals in possession of contiguous holdings were not necessarily united by any real or pretended bond of relationship. It was impossible that groups of holdings scattered over the hills should form village communities. The holding was itself the true revenue unit, and the man who held it had an equitable title to remain undisturbed so long as he tilled the land and paid the rent. The cultivators had a right of user in the waste, but the title of the State to do what it pleased with it was clearer and stronger than in the eastern plains, where the ruler might well hesitate to interfere with powerful villages. In Kangra, the most important hill district in the Panjab, the first settlement officer tried to squeeze the tenures into a pattern which he knew. He transformed into estates the large groups of scattered holdings which the Rajas had formed for revenue purposes. In this way he subjected the landholders to a purely artificial bond of joint responsibility for the payment of land revenue. What was more serious he allotted to these unreal village communities large areas of waste, much of it forest land, as common property. The result has been that the State has been greatly hampered in its efforts to preserve forest growth for the good of the surrounding population and of the community at large.

No greater contrast can be imagined than that which exists between the green hill country of Kangra in the north east of the Panjab and its arid south western plains. Curiously enough extreme dissimilarity of agricultural conditions produced very considerable resemblances in land tenure. The rainfall in the South West is so scanty that outside the strips of land close to the great rivers cultivation depends wholly on artificial irrigation. To supply this became the best foundation of a permanent title, and it was recognized that this had been acquired in one form or another by the well sinker over the land reclaimed through its means from the vast surrounding waste. The latter was used as a grazing ground for sheep and a browsing area for goats and camels. Certain tribes or leading families which from time immemorial had pastured their flocks and herds in the waste claimed rights over it like those which the Rajas asserted over the hill forests. Similar rights were claimed by the descendants of holy men

to whom rulers or people of influence had made grants, and by farmers of the land revenue, who by a familiar process had developed out of a fiscal privilege a proprietary title. Sometimes groups of men of a grazing tribe or the members of an important family sank a number of wells, partly to water their cattle and partly to grow a little food, in a single locality, and built their houses on a common site. But often the well sinker had to obtain the assent of some overlord, generally the head or heads of one of the old tribes or families, and pay a small quit rent in the form of a fraction of the produce as a perpetual acknowledgement of seigniorial rights. When the Sikhs took over the country the administration of a large part of it was for many years in the hands of a very shrewd and capable governor, intent on increasing his revenue by promoting tillage. When he felt disposed he took over the right of allotting land for cultivation, but he wisely recognized the rights of the old families to seigniorial dues. The sinkers of wells in favoured spots scattered about the huge waste had often no bond of relationship or even of common interest. Each lived with his dependents and labourers on his own well, near which were grouped a few huts and cattle pens. The proper way of dealing with tenures of this sort would have been to treat the well as the revenue unit, and allot to it a reasonable area, say from 50 to 100 acres, and to make the well owner responsible to the State for land revenue and to the superior landowner for a small seigniorial fee. The waste should have been recorded as the property of the State subject to rights of user for grazing and browsing, so long as it was not broken up, by the old tribes of nomad graziers and the well owners. What was actually done was to form groups of wells into purely artificial estates, to attach to them large areas of waste, and make the owners jointly responsible for payment of the land revenue. The incongruity of this procedure was pointed out at the time, but the attraction of a sealed pattern was too strong to resist. The waste was so vast that the absurdity of handing it all over as personal property to scattered well owners and a sparse population of nomad graziers was fortunately perceived. Needless large areas were however enclosed in village boundaries, and lay uncultivated till many years later the State at great expense brought canal water to these thirsty lands. The tracts where State ownership was reserved are some of them now the sites of prosperous canal colonies, with hundreds of thousands of settlers drawn largely from congested districts in the Central Panjab. The vast area of sandy waste between the Jhelam and the Indus was handed over entirely to a comparatively small number of families. Accordingly when some years ago there was a question of excavating a great canal from the Indus, it was thought necessary, as a preliminary step, to induce the descendants of these people to surrender their rights in part of what without water was practically worthless in return for the promise of irrigation in the part they retained. It seems probable that the recognition or non-recognition of the superior proprietary title, entitling the holder to receive a seigniorial fee, depended sometimes on the idiosyncracies of individual settlement officers. The tenure has also been

extinguished in a number of cases by the inferior owner buying out the superior owner's right, the intrinsic value of which has often been small.

The juxtaposition of dominant families and of a miscellaneous collection of inferior tribes, which is common in the South Western Panjab, is equally a feature of the North Western districts. But there religious dislike and political expediency had led the Sikh Governors, whom we displaced, to do their utmost to depress the great Muhammadan families and tribes, which in some cases had actually ruled over large tracts. The result was that the old tenures, except in the wilder Western tract, where the Sikhs had to be content with a more or less nominal sovereignty, had to a large extent been obliterated. The British officers charged with the making of the registers of titles in land were faced by contending claims, the actual cultivators seeking to maintain the status quo, and the old families clamouring for the revival of rights wrested from them by the oppression of the Sikhs. The original villages of the leading clans often covered very large areas, and cultivators had been located in outlying hamlets, whose occupants now claimed to be treated as entirely independent communities. Tenants in the parent villages alleged that they also possessed full ownership, because in the Sikh times the old landholders had received no sort of recognition of proprietorship. It is a curious fact that our officers for some years after annexation viewed the claims of old families with scant sympathy. Fortunately the settlements of a large part of the North Western Panjab were not completed till after the Mutiny. The shock of that convulsion again turned men's thoughts to the dangers besetting a society in which everyone is on a dead level of mediocrity, and after 1857 there was a disposition to concede something to the descendants of men who had been stripped of their rank and privileges by the Sikhs, while maintaining to the actual cultivators of the soil most of the advantages of which we found them in actual possession. In no part of the province was the influence of settlement officers in moulding, and even creating, land tenures more strongly marked. They had in fact to seek a fair compromise, and were not unsuccessful in finding one. Three classes of right holders emerged, the superior owner, the ordinary owner, and the limited owner. The last and lowest class were recognized as owners of the lands they tilled, but they had no share in the village waste. Some of them were not even full owners of their own holdings, but paid a proprietary fee to the ordinary owners, who were regarded as the real village community. The latter class had rights in the waste. But where our officers held that the existence of a superior proprietor was proved, the ordinary owner had to pay him, harvest by harvest, a seignorial fee. In the west the old families had, as already remarked, been able to maintain their position fairly well even under the Sikhs, and there we still find large properties consisting of several, or even many, villages owned by a single person or by a small group of near relatives. Here too some of the superior owners, as in parts of the southwest, besides receiving seignorial dues are recorded as owners of the waste. The village community in the true sense of the term hardly existed in large parts of the North West Panjab.

One of the oldest forms of land tenure in the world, the periodical redistribution of village or tribal land, survived till comparatively recent times, and possibly still has left its traces, among the Pathan tribes on the North West Frontier of British India, and is widely prevalent among the independent tribes which, though lying beyond the administrative border line, are subject to the political control of the Chief Commissioner of the North West Frontier Province. It is a more curious fact that it still exists among a few village communities in the extreme south-east of the Panjab. A Pathan tribe usually acquired its possessions by the sword. Having done so, it proceeded to partition the conquered lands. Each subdivision of the tribe took its own block, and each clansman in the subdivision, took his share in one or several parcels, as soil conditions dictated. Sometimes a share was allotted for each woman and child. The subdivision built a big village in its block and called it after its own name. Besides the clansmen the village population included religious men, and village servants and artisans, who held land free of charge in return for services in peace and war. Another class of dependents of superior rank was located in hamlets on the outskirts of the block. They were known by the picturesque names of "loin-girders" and "dwellers in the shade", paid no rent, and in time of peace rendered no service. But when their Pathan overlords, in whose shade they sat, were raided or marched out to raid others, they were bound to join in the fray. To secure a continuance of the original equality of division, it was the rule that the land should be redistributed at shorter or longer intervals. In Peshawar the custom lasted down to a comparatively recent period and even involved the transfer of whole villages. "Shifting severalty" is likely to disappear when a civilized Government fixes for a term of years the State's rent for each holding, and when the order it establishes encourages the extension of cultivation and the assertion of individual rights. But among the independent Pathan tribes it will probably long survive, and be a source of trouble and bloodshed. In 1901 heavy fighting went on in Upper Swat across the Peshawar border, because after one subdivision had held an important village for twenty-five years, the others thought it was their turn. Among Pathan tribes religious men and chiefs were often given special grants of land for their maintenance. It is easy to see how, when once subdivision broke down, Pathan tenures would take on themselves forms very like those familiar elsewhere, and that is what has actually to a large extent happened.

It is the business of a registrar of titles in land to record facts as he finds them. But in the special circumstances which attended the occupation of the Panjab by the British, it was justifiable to go further and to revive titles in abeyance, which had been recently destroyed by the oppressive acts of our immediate predecessors. It is questionable whether this might not equitably have been done more freely. But on the whole the settlement officers did their work well. They cannot be charged with subverting the communal character of the land tenure; on the contrary, their tendency was to impose a communal village organization where it did

not exist, and in fact could have no real existence. The threat to the integrity of the indigenous land tenures came not from any action on their part but from economic and legal causes.

The early administrators of the Panjab had sufficient statemanship to see how essential it was that a foreign government should maintain the framework of society which it found in being. But they could not but be affected by the exaggerated individualism which marked the economic theories prevalent in the middle of the 19th century, and by the notion that agricultural advance depended on the attraction of fresh capital to the business of tillage. Accordingly we find a very distinguished officer, who became the second Lieutenant Governor of the province, apologizing for the giving of legal force to a village custom of pre-emption, which was designed to prevent the intrusion of strangers into the communal landholding community. Still stranger is it to read in an early manual for the guidance of officials that the author contemplated without regret "a gradual process" by which the existing village communities might "melt away and give place to a more modern and perhaps more politically nice distribution of property".

For the next twenty years everything tended to break up the old order. The mere advent of a strong Government affording equal protection and equal justice to all made the individual landholder less dependent on the support of his agnates and of the village community. The multiplication of courts of law and of an inferior type of lawyer among a people naturally quarrelsome and litigious inevitably sapped the influence of the village councils, which for practical purposes gradually faded out of existence. A cash assessment distributed for a long term of years over holdings created a state of things in which communal responsibility for the revenue demand was rarely intruded on the attention of the individual landholder. The moderation of the State's revenue or rent, and the security of title given by an authoritative record, meant for the peasant proprietor a great inflation of credit. His old plan of limited borrowing on the pledge of crops, cattle, or jewellery, was replaced by extravagant borrowing on the security of the land. Sales and mortgages to moneylenders became a common and increasing feature of village life, and the right of the next heirs to object fell practically into abeyance. The official attitude for some time was apathetic. Shortsightedness masquerading as common sense was not alarmed, and talked of the investment of capital in the soil. Even among those who viewed the growing disappropriation of the peasantry with misgivings, there was a disposition to regard the process as the inevitable result of economic laws, and to hope that it would not go too far. But, as each quinquennium showed that the hope was vain, opinion changed. The social and political evils of a landless peasantry came to be recognized. The belief that the maxims of western political economists, as laid down in the middle of last century, could be applied to every country and stage of society was shaken. Experience showed that the capitalist landholder in India was as a rule nothing but a rent-receiver. The interest in primitive institutions aroused by the works of Sir Henry Summer

Maine and others was stimulated among English officials by the abundant evidence of their survival in India, and it became clear that ownership in the English sense, involving as it does free power of disposition, was wholly alien to the ideas of the Panjab peasant. This truth became apparent to the Chief Court of the province, and from 1887 onwards it formed the foundation of a series of decisions on sales and mortgages by sonless proprietors, adoption, gifts, and pre-emption. It was well that the courts should at last have put themselves in line with facts. But by the time they did so the process of disintegration had gone too far to be cured by correct expositions of village custom, and it had become increasingly evident that the evil must be cured, if cured at all, by legislation.

The remedy adopted after long discussion is embodied in the Panjab Land Alienation Act of 1900, which imposed very drastic restraints on land transfers. It gave the State power to declare by notification what tribes in each district were "agricultural". It forbade any member of an agricultural tribe to sell land to a non-agriculturist without the sanction of the officer in charge of the district, the intention being that sanction should only be given in exceptional circumstances. The usual form of Panjab mortgage, by which the mortgagee took the landlord's share of the produce instead of interest, and assumed all the rights and liabilities of the landowner till the principal was repaid, was made illegal in the case of land mortgaged by a member of an agricultural tribe to a non-agriculturist. Other forms existed which were still more burdensome to the mortgager. These also disappeared. Certain statutory forms were substituted, the only one of any practical importance being a mortgage for a limited period not exceeding twenty years, all the rights of the mortgager being suspended, and the rents and profits enjoyed by the mortgage being taken as extinguishing by the end of the term his claim for both principal and interest. Sales of agricultural land in execution of decree, which had always been subject to severe restrictions in the Panjab, were absolutely forbidden as regarded land owned by members of agricultural tribes. It may be noted in passing that under the Civil Procedure Code the following kinds of property belonging to an agriculturist are exempt from attachment

- (a) implements of husbandry,
- (b) the cattle and seed grain necessary for him to earn his livelihood,
- (c) the house and other buildings which he owns or occupies.

For the present the Government has with rare exceptions treated all scheduled agricultural tribes in a district as a single group, and has permitted a man of one such tribe to sell or mortgage without restraint to a man of another. But it holds in reserve the power to treat each tribe as a group by itself and still further to limit freedom of transfer. The exercise of this power may in some cases become necessary, e. g. if one agricultural tribe should develop to a serious extent landgrabbing tendencies, and the result be rapid disappropriation of economically weaker tribes.

It will be observed that the motives of this legislation were political and economic. No direct attempt was made to re-establish the "family" holding as the unit of the village communities. But a strong barrier was

set up against the further intrusion into these communities of the most dangerous element of disintegration, the small trader and moneylender. For the protection of the family holding the village customary law, now better understood, remained intact. One branch of that law, which has been twisted out of its original shape, the Government decided to re-fashion. Pre-emption had been robbed by two old judgements of the Chief Court of most of its meaning. Usufructuary mortgages of the type already described were far more common than sales, and in practice in a great many cases involved the permanent disappropriation of the peasant mortgager. But the Court held that the right of pre-emption did not apply to such mortgages, except where the village record of rights expressly provided otherwise. It also decided that a proprietor by purchase, though a stranger to the original village brotherhood, had as good a right as any agnate cosharer to claim pre-emption. Thus the custom which was intended to keep the stranger out was twisted in such a way as to make it easy for him to extend his possession once he had gained a footing. The same limitation of the right to sales and the same extension of it as regards the persons who might exercise it were unfortunately embodied in laws passed in 1872 and 1878. There was indeed a clause saving custom, but the tribal codes of custom subsequently drawn disposed of the subject by saying that it was regulated by law. When the Chief Court of the province realized that the old decisions were wrong it sought for evidence of the real custom in the old village records of rights. At last in 1905 a new Act was passed which as regards sales brought the law into conformity with custom, giving the right of pre-emption to the heirs of the vendor. Even in the case of a joint holding a cosharer not related to the vendor was given no right unless the agnate cosharers declined to take advantage of their prior title. It must be admitted that many judicial officers regard pre-emption in its practical working as pernicious.

The Land Alienation Act has succeeded in its object. It has stopped the disappropriation of the Panjab peasant by the moneylender, and it has not lowered the credit of the farmer to any undesirable extent. Indeed the value of land has continued to rise, and the revenue or rent charged by the State is not on the average more than one per cent of the selling price. Government action no longer aids and abets the disintegration of the family holding and the communal village community. Probably little more can be done. The old order will never return in its entirety, and perhaps in the changed surroundings of today it is undesirable that it should. Whether the communal village spirit, which has decayed so rapidly, will revive, is doubtful, and it must always be remembered that it was only strong at any time in part of the province. Proposals have been made to revive village councils by giving them power to deal with petty civil and criminal cases. It is uncertain whether any such revival would have permanent popularity or success. It seems more likely that, if common village life renews itself, its resurrection will be the indirect result of the growing movement of agricultural co-operation, which has been such a striking feature of the recent history of the Panjab.

UNITED STATES.

THE REGULATION OF THE FRUIT TRADE.

OFFICIAL SOURCES:

- AN ACT TO FIX THE STANDARD BARREL FOR FRUITS, VEGETABLES AND OTHER DRY COMMODITIES. 4 March 1915. Public. No. 307 63rd Congress.
- AN ACT TO FIX STANDARDS FOR CLIMAX BASKETS FOR GRAPES AND OTHER FRUITS AND VEGETABLES, AND TO FIX STANDARDS FOR BASKETS AND OTHER CONTAINERS FOR SMALL FRUITS, BERRIES, AND VEGETABLES, AND FOR OTHER PURPOSES. 31 August 1916. Public. No. 248 64th Congress.
- AN ACT TO ESTABLISH A STANDARD BARREL AND STANDARD GRADES FOR APPLES WHEN PACKED IN BARRELS AND FOR OTHER PURPOSES. 3 August 1912.
- THE DELAWARE APPLE LAW. 12 March 1915.
- AN ACT TO ESTABLISH A STANDARD FOR THE PACKING IN THE STATE OF CALIFORNIA OF THE KINDS OF FRESH FRUITS SPECIFIED IN THIS ACT, FOR SALE OR FOR TRANSPORTATION FOR SALE, FOR INTERSTATE AND FOREIGN SHIPMENT, AND TO PREVENT DECEPTION IN THE PACKING; ALSO TO ESTABLISH A SYSTEM OF INSPECTION OF THE SAME. 10 June 1915. Chapter 659. A. B. 851.
- AN ACT REGULATING THE SALE, OFFERING FOR SALE OR EXPOSING FOR SALE OF VEGETABLES, GRAPES AND FRUITS; PROVIDING STANDARD CONTAINERS, BASKETS AND TRAYS, THEREFOR; AND IMPOSING PENALTIES. 1 May 1916. Pennsylvania, No 121.

OTHER SOURCES:

CALIFORNIA FRUIT NEWS. Vol. 54, Nos. 1483 to 1486; 9, 16, 23 and 30 December 1916; San Francisco.

For several years there has been in the United States a movement towards giving a more stable basis to the trade in fruit and vegetables so as to simplify to a great extent the relations between the producer and the buyer. Congress and the assemblies of several States have taken the matter up and have sought to standardize the various products, if not for a whole State at least for the whole territory of a county, and to determine the shape, kind and dimensions of standard receptacles in which they are transported, so that a merchant knows exactly, having the guarantee of State inspection, the weight and quantity of fruit in any box or other package which he receives.

The importance of such measures has been similarly recognized in other countries, such as Canada and Australia, where also the fruit trade is regulated for the prevention of frauds at the expense of merchants or consumers and the simplification of transactions of purchase and sale.

The Californian law, which we will presently analyse, has considerable bearing not only on trade but also on the production of the State in general. The fixing of standards results in closing the foreign market to

defective fruit ; and growers therefore seek to improve the average quality of their products by choosing more carefully the varieties grown and by more scientific culture. Hence will result an increase in the horticultural wealth of the State.

No forecasts can be made as to the future development of these ideas in the many States of the Union, but the interest taken in the matter by the Federal Department of Agriculture allows the supposition that the example of California will be followed in other fruit-growing regions.

§ I. THE ORGANIZATION OF THE FRUIT TRADE AND THE ACTIVITY OF THE OFFICE OF MARKETS.

As now organized the production of perishable fruit and vegetables is a highly specialized agricultural industry. It is concentrated to a large extent in certain localities but it is conducted mainly on a small scale. Many of the regions especially devoted to fruit growing are situated far from markets. The industry in this specialized form came into existence when the growth of great cities necessitated the drawing of supplies of perishable food from larger areas than those comprising the farms in the cities' immediate neighbourhood, and when railroads made the utilization of this larger area possible. Areas for producing perishable food have now been extended into the extreme south and south-west. Of approximately 100 million tons of farm produce annually transported by train about 20 million tons are perishable. Public authorities, growers and merchants have already for many years studied, each from their own point of view, the problems inherent in the transport and sale of these perishable products.

a) *Production.* — Perishable fruits and vegetables are grown on a relatively small scale while the large aggregate demands of the great market centres have brought into existence dealers who handle such produce only in large lots. This fact and the recognition that many other problems of marketing these goods could be solved only by giving the producers some of the advantages of operations on a large scale led the Office of Markets and Rural Organization early in its work to advocate the co-operative organization of growers wherever conditions were favourable.

b) *Preparation for Transport.* — Perhaps the most serious losses in this trade are due to unseasonable picking of the fruits and vegetables or their improper handling after they are ready to be marketed. The products are handled roughly and their decay on the way to the market is thus facilitated. Careful grading of the harvested products is also essential if they are to secure a reasonable price. And not the least of the problems connected with this trade is that of the packing of these perishable goods and of selecting for them suitable receptacles, of the proper type and dimensions, which will give them adequate protection and an attractive appearance and will not be too costly.

Another step which can be taken with profit, when certain valuable products are to be transported under refrigeration over long distances,

is the precooling of the packed fruits or vegetables by blasts of very cold air immediately before or just after they have been placed in the refrigerator cars. When perishable goods are stowed at their normal temperature in a refrigerator car the limited quantity of ice used does not chill them for several days. As a result they continue to ripen and in many cases begin to decay. Precooling obviously cannot be practised by individual consigners on a small scale but it would be profitable in many cases to co-operative associations. It has proved particularly valuable to such of these associations as transport oranges from California across the continent.

The Office of Markets and Rural Organization finds that the producer may grow and even develop varieties of fruit or vegetables which will remain in good condition for long periods and stand better than the usual varieties the delays and rough handling to which consignments may be subjected before they reach the consumer.

c) *Sale.* — The losses of perishable fruits and vegetables are not due solely to the mechanical operations of marketing — the handling at producing points, on cars and at the market. The intangible machinery of supply and demand causes the heaviest losses, bringing about violent fluctuations of price and also gluts. One fact emphasized by the investigations of the Office of Markets and Rural Organization is that even when there is a severe general glut of a commodity that quantity of it which is really first-class can often be sold profitably. Indication of an impending glut should therefore cause the producer to grade more strictly than ever. Gluts due to faulty distribution can be prevented when it is possible to keep consigners accurately informed as to supplies at marketing points. By surveys of producing areas and market centres the Office of Markets and Rural Organization has collected as many data as possible with regard to the supply of and demand for perishable produce. The normal consuming power of numerous markets for certain products has been ascertained and the data have been furnished to consigners with excellent results.

The advantages gained by standardized handling, grading and packing are strikingly shown by results obtained in the Californian citrus industry. Large losses accompanied almost every consignment to eastern markets in the earliest days of the industry, when practically all enterprise was individualistic. Many such losses were due to defective transport but an appreciable proportion to a failure properly to grade and pack the fruit. Co-operative organizations arose and undertook to a large extent the work of grading and packing. Losses were materially reduced but not to the point felt to be desirable. Investigations begun by the department shortly after 1900 disclosed the fact that careless picking was chiefly responsible for the remaining losses. Picking as well as grading and packing was then standardized throughout the industry, and losses were brought down to a very satisfactory minimum.

Recent investigations of the canteloupe industry by the Office of Markets and Rural Organization showed the need of standardizing the hand-

ling of this product also. Losses were found to result on a failure carefully to select the melons for size and quality, on loose and unattractive packing and on the use of receptacles of haphazard sizes and shapes. Studies of the marketing of berries, peaches and other perishable products have further emphasized the general need for standardization.

In studying the problems of standardization involved in the marketing of these perishable products the office has also gathered information as to the methods in which they are solved in various places. A bulletin as to this phase of marketing canteloupes has been issued, and bulletins on grading, packing and transporting other fruits and vegetables will follow. The office is also compiling a digest of State laws on standardization and on the weights and measures used in marketing.

It is believed that co-operative associations may be relied upon as important factors in bringing about a general adoption of standards for supplies and methods in marketing. Such organization can extend uniform practices over important provinces, and standardization on a larger scale can be effected through national organizations.

§ 2. THE CALIFORNIAN ACT OF 1915 AS TO THE FRUIT TRADE.

State and Federal legislation have to some extent applied the principles discovered and brought forward by the Office of Markets and Rural Organization, principles accepted alike by producers, dealers and consumers.

In 1912 Congress established a standard barrel to be used for apples in inter-State commerce. On 4 March 1915 Congress passed an Act, which had force from 1 July 1916, to fix a standard barrel for fruits, vegetables and other dry commodities; and on 31 August 1916 a third Act, which has force from 1 November 1917, fixed standards for "Climax" baskets for grapes and other fruits and vegetables, and fixed standards for baskets and other containers for small fruits, berries and vegetables.

Further on 12 March 1915 an Act was passed in Delaware which amended chapter 21 of the State's revised code by provisions regulating the grading, packing, marking, transport and sale of apples. In California on 10 June 1915 the legislature passed an Act "to establish a standard for the packing in the State of California of the kinds of fresh fruit specified in this Act, for sale or for transportation for sale, for interstate and foreign shipment, and to prevent deception in the packing; also to establish a system of inspection for the same". On 1 May 1915 the Pennsylvanian legislature passed an Act "regulating the sale, offering for sale or exposing for sale of vegetables, grapes and fruits; providing standard containers — baskets and trays — therefor; and imposing penalties."

a) *The Provisions of the Law.* — We will examine in more detail the Californian Act. It has been possible to observe its working for a year, and owing to the importance of fruit growing in California it has been the subject of much discussion.

The principal provisions of this law, passed on 10 June 1915 and effective since 9 August 1915, are as follows :

" There is hereby created and established a standard for the packing of fresh fruits, for interstate and foreign shipment, of the kinds specified in this Act. Any box, basket, package or container of fresh fruit of the kinds specified in this Act, which shall be packed and offered for sale or for transportation for sale, shall be packed in accordance with the specifications herein made. All deciduous fruits of the kinds specified in this Act when packed shall be practically free from insects and fungous diseases. All fresh fruit of the kind specified in this Act which shall be sold in bulk, or loose in the box without packing, shall be exempt from the provisions of this Act.

" All cherries packed in boxes or packages shall contain fruit of practically uniform quality and maturity and one variety only, except that such boxes or packages may contain more than one variety if such fact be plainly stamped on the outside of the box or package with the words " Mixed Varieties " with letters one half inch high. Each box or package (of cherries) shall be stamped on the outside with the minimum weight of contents and name of variety or varieties. Peaches, apricots, pears, plums and prunes shall be of practically uniform size, quality and maturity. When packed in crates, packages or containers, made up of two or more subcontainers having sloping sides for the purpose of ventilation of the fruit therein, the fruit shall not vary in size more than ten per cent. and no layer below the top layer shall contain a greater numerical count than the top layer. Each box, crate, package, container or subcontainer shall be stamped upon the outside with the minimum weight of its contents, shall bear in plain letters the name of the variety contained therein, shall also be marked with the approximate number of peaches in the box which shall be within four peaches of the true count. Grapes packed for table use shall be of uniform quality and maturity and shall be well matured and show a (determined) sugar content.... Each crate or other package (of such grapes) and containers therein shall bear in plain figures the minimum weight of contents.... Berries shall be packed in uniform packages. Canteloupes shall be placed in standard crates.

" All boxes, crates, packages or containers shall bear upon them, in plain sight and plain letters on the outside, the name of the orchard, if any, and the name and post office address of the person, firm, company, corporation or organization who shall have first packed or authorized the packing of the same, also the name of the locality where the fruit is grown.

" In counties having a county horticultural commissioner it shall be his duty and the duty of his deputies, acting as inspectors, which office is hereby created, to enforce the provisions of this Act... In a city and county or in counties having no county horticultural commissioner or deputy, it shall be the duty of the county board of supervisors, upon petition filed with them, to appoint inspectors. Said petition shall be signed by at least twenty-five bona fide fruit growers residing in that county or city and county. Upon the petition of twenty-five resident freeholders

who are fruit growers or shippers of fruit, the county horticultural commissioner or board of supervisors... shall immediately remove said inspector for neglect of duty, malfeasance in office or general unfitness for office....

"Any person, firm, company, corporation or organization who shall knowingly pack, or cause to be packed, fruit of the kinds specified herein, in boxes, crates, packages, containers or sub-containers, to be offered for sale or transportation for sale, in wilful violation of this Act, shall be guilty of a misdemeanour."

b) *The Application of the Law.* — This law was originally drafted by a committee of interested growers and consigners in consultation with the State horticultural commissioner. It was amended many times but always by its friends.

Various counties had tried for some years to accomplish the desired regulation of packing by agreements with the growers, the transporting companies or both; but saving in the case of Eldorado and Placer counties their success was no more than partial or temporary. In Eldorado and Placer counties the voluntary associations of shippers and growers issued printed rules and diagrams which were posted in the orchard packing houses. The scheme worked exceedingly well where the shipping firms co-operated and refused any package below the standard, but otherwise the need of State authority for the inspectors was seen. The present law was largely based on experience of these regulations, and thus it emanated from the industry itself and public sentiment had been to some extent prepared for it.

The law has helped the grower because it has raised prices, largely as a result of the better standard reached by the fruit. It has helped the consumer and the general public because the improvement in quality has outweighed the increase in prices. It has benefited the transport companies who have received, with the better prices, more for their work, and have been able to show better profits to their stockholders.

The absolute impossibility of an examination by the inspectors of every packed box of fruit is apparent. The greatest good can be accomplished only when the fruit growers, packers and shippers themselves are in sympathy with the work and willing to co-operate with the inspectors by conforming to specifications. It was this co-operation of growers, packers and shippers with county horticultural commissioners, in San Joaquin, Fresno, Sacramento and other counties growing table grapes, which made possible last year an efficiently standardized packing of grapes resulting in splendid prices.

In the first year for which the law was in force about 20,000 carloads of fresh deciduous fruit were subject to its provisions. The experiment was entirely satisfactory, eastern buyers referring to the "marvellously scientific pack of California fruit". Thousands of crates of fruit were rejected, but the grade of the consignments was raised many per cent. with comparatively little injury to anyone and extremely low administrative costs. Many thousands of dollars were added to the industry.

c) *Suggested Modifications.* — The chief abuses which the law sought

to remedy were the following : 1) Topping — a top layer of good berries conceals inferior berries ; 2) Irregularity of size and of degree of maturity within one package ; 3) Pest infection which in States having quarantine laws results in the condemnation of whole consignments ; 4) The mixing of varieties in one package ; 5) Wrong and irregular marks ; 6) Small content of sugar. In one year progress has been made towards preventing these abuses and the law has thus been shown to have great practical value.

At the Forty-Ninth State Fruit Grower's Convention, held at Napa in November 1916, some proposals were however made for completing and improving the regulation of the fruit trade. These were mainly : *a*) that all counties should by certain procedure be compelled to appoint inspectors ; *b*) that the different counties of the State should formulate uniform standards, thus introducing simplicity into the trade and allowing distant buyers to place orders at fixed prices for definite classes of goods ; *c*) that packed fruit should be more precisely defined ; *d*) that the law should apply to all consignments of fruit, including those intended for Californian markets ; *e*) that some central authority should have complete control of the inspection of fruit.

§ 3. AN EFFORT TO STANDARDIZE THE POTATO TRADE.

While the movement towards the standardizing of fruit intended for sale is thus gaining ground, an effort is also being made in many States to standardize the potato trade which has not yet been scientifically organized. Wholesale potato merchants recognize the need for standardization in order to minimize the expense, risk and waste which threaten to change into loss the small profits of this trade. Two grades, N° 1 and N° 2, should be established for every variety of potato grown. The use is recommended of machine potato diggers, and of machine sizers or graders which grade the potatoes according to size only, leaving the producer to grade them according to quality or in other words to weed out those which are defective.

The trade is simplified by the use of uniform containers. A Federal Act fixes the capacity of the barrel commonly used for potatoes but a large variety of sacks are also used and the fixing of prices in the different markets is thus needlessly complicated.

For the realization of the desired reform the formation of co-operative associations and the aid of those already in existence would be of the greatest service.

FRANCE.

THE CONDITIONS OF RURAL LIFE IN FRANCE.

OFFICIAL SOURCE :

DUGÉ DE BERNONVILLE (L.) *Enquête sur les conditions de la vie ouvrière et rurale en France en 1913-1914 (Enquiry as to the conditions of labouring and rural life in France in 1913-1914). In Bulletin de la Statistique générale de la France et du Service d'Observation des Prix. — Vol. V, part I, Paris, October 1916 ; Vol VI, part II, January 1917.*

By a decree of 17 May 1913 a commission was instituted at the Ministry of Labour for the study of " the physiology of labour in trades, and the conditions of existence and aptitude for trades and its formation in labouring and peasant families ". This commission comprised members of parliament and members of the *Institut de France* and of scientific bodies. It divided itself into two sub-commissions of which one undertook research in laboratories and the other investigations and statistical research. Among the items on the latter's programme was " Diet of labouring and rural families. Share of alcohol in the family budget. Relation between housing and a labourer's health and life ".

Before we examine the results of this enquiry into rural life we will to some extent specify the method of research.

§ I. METHOD OF ENQUIRY.

Following on a circular of the Ministry of Labour, dated July 1913, the prefects supplied lists of those willing to collect the necessary data. In order to ensure uniformity two forms of questions were prepared, one covering information as to each family visited, the other as to each village or rural district taken altogether. The latter form could be filled up only in the rural districts but the former equally well in a town. The questions on the former bear on the detailed composition of a family, its diseases, housing conditions, conditions as to trade and income, duration of work, cost of food, heating and lighting and finally skill in a trade. The second form provides information as to the number of families in a district and their distribution according to trades, the conditions of rural industries, the designation of disabled persons, rural emigration and the cost of maintaining children in labouring families.

In March 1914 the *Statistique Générale de la France* had collected 3200 questionnaires regarding families and 330 regarding villages distributed in forty-nine departments. When it had taken stock of these first results the commission expressed a wish for the extension of the enquiry to all departments. Consequently a certain number of new forms were sent out between March and July 1914. The declaration of war prevented the pursuit of the enquiry and arrested the commission's labour. At the end of July 1914 the *Statistique Générale de la France* had brought together 3700 questionnaires regarding families and 450 regarding villages distributed over fifty-seven departments. The formation, in consequence of the financial law of 15 July 1914, of a department for the observation of prices allowed a first abstract of the forms to be made by this department.

Thirty departments forwarded no questionnaire, namely Aisne, Allier, Ariège, Aude, Cantal, Charente-Inférieure, Cher, Dordogne, Gers, Hérault, Ille-et-Vilaine, Indre, Loire, Loire-Inférieure, Maine-et-Loire, Manche, Marne, Nièvre, Pas-de-Calais, Puy-de-Dôme, Hautes-Pyrénées, Pyrénées-Orientales, Rhône, Seine, Seine-et-Marne, Deux-Sèvres, Tarn-et-Garonne, Vendée and Vienne. The papers received were very unequally distributed among the other fifty-seven departments. Some, like Nord, Oise, Saône-et-Loire and Seine-Inférieure, sent in hundreds of questionnaires, others a fairly large number of them, and yet others only a few. The larger number of filled-up questionnaires came from rural communes or small towns. Nearly a quarter were signed by schoolmasters. Generally speaking the forms are carefully filled up, with the exception of the relatively small number filled up by the heads of families themselves. As a rule the investigator has noted the facts, after having questioned those interested and verified data by every means in his power (1).

§ 2. INCOME OF AGRICULTURAL LABOURERS.

The category of agricultural labourers comprises journeymen working at agriculture and labourers working by the day or the piece, agricultural labourers paid by the month, the season or the year, and farm servants. It excludes farmers, métayers and owners cultivating their own lands.

Of the agricultural labourers reached by the enquiry some were fed by their employers but the majority were not. If the households be grouped

(1) The families forming the object of the collected monographs may be classified according to the trade followed by the head of each family in the following five large groups : 1) labourers in factories, commerce and transport ; 2) various employees and officials ; 3) artisans and small traders working for themselves ; 4) landowning agriculturists and farmers and métayers ; 5) agricultural labourers.

by districts or regions (I), and in each region according to the number of their members, the results shown in the following table are obtained :

TABLE I. — *Families of agricultural labourers not fed by employers.*

(N = Number of families visited. — I = Annual income in francs).

	Number of members of a family							Total
	2	3	4	5	6	7	8 and more	
Region I	N. 11	13	15	19	18	4	15	95
	I. 1,485	1,374	1,750	1,591	1,783	2,062	2,394	1,757
Region II	N. 7	6	10	9	7	4	3	46
	I. 1,338	1,240	1,075	1,298	1,086	1,065	1,271	1,194
Region III	N. 3	4	4	2	7	2	5	27
	I. 1,007	1,032	1,417	950	1,003	860	1,659	1,176
Region IV	N. 2	2	5	—	1	2	—	12
	I. 780	1,145	1,292	—	1,200	1,900	—	1,276
Region V	N. 1	4	4	4	4	3	2	22
	I. 1,600	1,172	979	1,369	940	1,405	1,175	1,182
Region VI	N. 2	3	4	3	4	3	—	19
	I. 940	1,417	875	1,267	982	1,282	—	1,116
Region VII	N. 16	7	10	5	7	4	3	52
	I. 882	1,262	1,466	1,176	915	1,032	1,164	1,106
Region VIII	N. 2	8	6	9	6	7	10	48
	I. 1,018	1,040	1,092	1,060	1,181	1,114	1,730	1,221
Total	N. 44	47	58	51	54	29	38	321
	I. 1,134	1,231	1,341	1,344	1,274	1,310	1,872	1,343

The average annual income of all the 321 households observed comes out at 1343 francs or about two thirds of the figure obtained, by the same enquiry, in the case of industrial workers' households. We should note that income in kind is notably greater in the case of the agricultural than

(1) The following regions are those to which the table refers :

Region I : Seine-et-Oise, Oise, Somme, Nord. *Region II* : Ardennes, Meuse, Meurthe-et-Moselle, Vosges, Haute-Marne, Aube, Yonne, Côte-d'Or, Haute-Saône, Saône-et-Loire, Territoire de Belfort. *Region III* : Doubs, Jura, Ain, Savoie, Haute-Savoie, Isère, Basses-Alpes, Hautes-Alpes. *Region IV* : Alpes-Maritimes, Var, Bouches-du-Rhône, Vaucluse, Ardèche, Gard, Drôme. *Region V* : Lot, Lot-et-Garonne, Gironde, Landes, Basses-Pyrénées, Haute-Garonne. *Region VI* : Corrèze, Aveyron, Lozère, Haute-Vienne, Creuse, Haute-Loire. *Region VII* : Charente, Indre-et-Loire, Loiret, Eure-et-Loir, Sarthe, Mayenne. *Region VIII* : Eure, Calvados, Orne, Seine-Inférieure, Côtes-du-Nord, Finistère, Morbihan.

in that of the industrial households. The figures supplied by the enquiry do not allow the amount of this revenue to be fixed precisely. Its importance in relation to total resources can vary very much from household to household and district to district. This doubtless is the reason that the classification of households by districts seems to give no very important result. In any case however the number observed in each district is too small to make the averages truly representative. We will merely note that in Region I, the district of Nord, the income of agricultural labourers not fed by their employers seems to be higher than elsewhere.

The income in kind exists because most households possess a few bits of land on which they harvest some of the corn or vegetables on which they live and sometimes also keep a cow or a few pigs. In some districts, as in Meuse, a labourer who has no land receives from the landowner the loan of a field on which he grows potatoes or other vegetables. Very often the employer also gives him the firewood he consumes on condition he cuts and houses it outside his working hours. In Orne in some case the drink of families of agricultural labourers is the cider of the second brewing or cider-kin which the employer leaves to the labourers. All this income in kind has perhaps very little importance in the households of labourers fed by their employers, who most often work on a farm continuously, are the farm hands whose whole time, including Sundays, belongs to their employer. This may partly explain the fact that the difference between the earnings of the fed and the unfed labourer often appears to be very slight. The following figures concern 311 households of unfed and 117 of fed labourers and refer only to the earnings in money of the fathers of families.

TABLE II. — *Income of the families of agricultural labourers, fed and not fed by employers.*

Region		Families of labourers not fed		Families of labourers fed	
		Number of families	Father's average annual earnings	Number of families	Father's average annual earnings
I	93	1180	24	620
"	II	43	825	3	560
"	III	26	818	2	450
"	IV	12	727	1	200
"	V	22	812	2	550
"	VI	17	800	4	575
"	VII	52	766	38	749
"	VIII	46	842	43	606
		311	917	117	650

In the district of Nord the difference between the figures which refer to the two groups appears to represent approximately the cost of food ;

but this does not hold good for most of the other districts. In Region VIII, in particular, the difference is hardly perceptible.

In relation to the importance of income in kind the age of the labourers should be considered. In Region VII, in particular, a sufficiently large proportion of old men, whose earnings are comparatively small and below the average, has been observed. It is in this district — Loiret, Eure-et-Loir Sarthe — that the earnings of labourers fed by their employers seem to be highest, higher even than in the next region, that of Nord. The following figures show the amount of agricultural wages as estimated by the investigators.

In the department of Eure-et-Loir wages were estimated as follows :

Shepherd.	1000 francs a year and food
First carter	1000 " " " " "
General labourer . .	from 500 to 700 " " " " "

These amounts are said on an average to have doubled within thirty years. It is stated that wherever in Oise the custom of feeding employees has been preserved, that is in the western district of the department, the wages of carters and cowmen so fed are between 550 and 700 francs a year ; they are between 1100 and 1600 francs in the eastern and south-eastern districts where the men are no longer so fed. In Seine-Inférieure, according to an investigator, the annual wages of a carter so fed are 500 francs and the daily wages of a labourer so fed are 1.25 francs. For Haute-Marne the daily wages are given as follows :

	1881		1913	
	Summer	Winter	Summer	Winter
Journeyman workman fed by employer . .	2	1.50	3	2
" " not fed by employer	3.50	2.50	4	3

In Doubs a farm hind earns from 400 to 450 francs a year while in Aveyron 500 francs are said to represent his minimum.

Generally speaking, agricultural wages are found to have risen notably in the last thirty years, the rate of increase varying, according to the estimates, with districts or with the kinds of labourers, from 30 to 100 per cent. It seems also to be admitted that the circumstances of the labourers fed by employers are usually easier than those of such as are not thus fed ; but these conclusions result from estimates which are mainly subjective and it is very difficult to arrive at any such by precise numerical data.

Table III shows for all regions the various elements of the income of all the labourers' households, classified according to the number of their members. The calculation does not apply to the households of labourers not fed by their employers.

TABLE III. — *Families of agricultural labourers not fed by employers.
Proportional distribution of elements of incomes.*

Number of members of a family	Number of families visited	Proportion per 100 francs of total income					
		Father's earnings	Mother's earnings	Children's earnings	Other income	Relief	Total
2	44	74.6	15.3	5.9	3.4	0.8	100.0
3	47	73.5	13.3	9.4	3.0	0.8	100.0
4	57	58.6	14.2	23.4	1.5	2.3	100.0
5	51	70.0	12.3	16.6	0.5	0.6	100.0
6	52	74.6	9.9	12.2	2.1	1.2	100.0
7	28	62.6	11.7	22.4	0.9	2.4	100.0
8 and more	38	51.2	6.6	38.4	0.2	3.6	100.0
	317	66.0	11.7	19.0	1.6	1.7	100.0

These proportions do not differ from those established by the enquiry in the case of industrial workers.

§ 3. METHODS OF EMPLOYING INCOME.

As regards the employment of incomes it would have been impossible to make out for each household an annual complete and detailed budget of expenses. It was necessary to limit enquiry to expenses of certain categories as to which it was possible, simply by questioning those interested, to obtain sufficiently approximate numerical data admitting of verification. Costs of rent, taxes, insurance and the various subscriptions paid to syndicates, to mutual societies or as provision for retirement are easily determined. To calculate the cost of food is more difficult: indications as to a week's consumption have been collected and thus it has been possible not indeed to draw precise conclusions as to the exact importance of the cost of food in the annual budget, but to deduce general data as to the variation of expenses when conditions of households are modified. A special place in the question form was reserved for spirits consumed away from home.

As in studying incomes we will leave out entirely landowning agriculturists who are largely supported by food they grow themselves.

1) *Cost of food.* — The reasons which make it difficult to determine conditions of life among agricultural labourers much diminish the value of the data as to cost of food collected by the enquiry. However by including only households which apparently produce for themselves only the vegetables grown in their gardens, it has been possible to draw up Table

VI which applies to 185 households of agricultural labourers not fed by their employers, distributed over the eight regions already named.

For all these 185 households the average weekly expenditure was 22.28 francs per household and 6.07 francs per personal unit (1). If annual expenditure be taken to be equal to weekly expenditure multiplied by fifty-two, we reach the result that food and drink absorb 81 per cent. of income in these families (2).

TABLE IV. — *Households of Unfed Agricultural Labourers.*
Average Expenditure on Food and Drink in One Week of Winter (francs).

Regions	Number of		Average annual Income	Weekly expenditure on food		Percentage of total Expenditure on Food and Drink						Ratio of expenditure on food and drink to total income
	house- holds	person- al units per house- hold		per household	per personal unit	bread	meat and sausages	milk	drink	spirits	other food	
I . . .	61	3.6	1,711	25.47	7.03	33.8	20.0	4.2	9.0	7.8	25.2	77
II . . .	19	4.0	1,395	22.57	5.65	31.9	23.6	5.0	11.8	3.6	24.1	84
III . . .	14	3.8	1,297	21.17	5.55	31.0	18.4	3.1	13.9	3.9	29.7	85
IV . . .	10	3.3	1,397	18.00	5.44	28.4	21.7	1.9	14.0	—	34.0	67
V . . .	6	4.0	1,183	20.14	4.99	34.8	21.4	3.2	13.2	—	27.4	88
VI . . .	14	3.7	1,262	17.95	4.91	30.0	19.9	1.7	26.4	—	22.0	74
VII . . .	27	3.1	1,197	20.66	6.67	32.7	16.8	2.0	12.8	3.6	32.1	90
VIII . . .	34	4.0	1,311	21.73	5.41	32.6	16.4	3.0	7.1	9.3	31.6	86
Total	185	3.7	1,431	22.28	6.07	32.6	19.3	3.4	11.2	5.7	27.8	81

The expenditure on food per head varies from 5 to 7 francs a week according to districts, but it should be noted that families belonging to the various districts vary in the amount of their income and in their composition. The largest expenditure takes place in the northern district in which income is highest. Expenditure is relatively large in Region VII (Central West) in which income is small but the average size of the observed families is also small. The average expenditure per personal unit is lowest in Region VI (Central Massif).

Bread absorbs about a third of the expenditure on food. For all the 185 households the percentage of the expenditure which goes to bread is

(1) A child is reckoned to constitute only a fraction of a "personal unit".

(2) The enquiry found that this percentage was only 71 in the case of the households of industrial workers in places comprising less than 10,000 inhabitants; but in these households the expenditure is larger per personal unit, namely 7.45 francs instead of 6.07 francs.

32.6 (1). Meat absorbs about one fifth of the total expenditure, 1.15 francs per personal unit. Of the households considered there are only six in which meat does not occur in the list of articles of diet consumed in the week of observation. Moreover the investigators agree that the use of meat is increasing considerably in country districts. The pig provides most of the meat consumed but many country families also eat butcher's meat, at least once a week. The proportion of meat consumed varies from region to region within fairly narrow limits and is least in the west. Compensation is provided by larger consumption of butter in this region and the use of fish in the coast districts. Contrary to what might be supposed *milk* holds a less important place in the diet of agricultural labourers than in that of industrial workers: in the 185 households it is considered to account for only 4 per cent. of the expenditure. Drink in these households absorbs 11 per cent. of the total expenditure on diet. The percentage varies however with regions, being 7 per cent. in Region VIII (West) in which only cider is usually drunk, 9 per cent. in Region I (North) in which the customary drink is beer, and as much as 14 per cent. in Region IV (South) and 26 per cent. in Region VI (Central Massif) in which wine is consumed.

The percentage absorbed by spirits varies in inverse ratio to that spent on other drinks. It is non-existent or insignificant in districts in which the habitual drink is wine but is considerable in districts in which beer or cider is drunk. Thus in the 34 households in Region VIII (West) spirits absorb 9 per cent. of the total expenditure on diet and 8 per cent. in the 61 households of Region I (North). There is certainly a very close relation between the nature of the habitual drink and the quantity of spirits consumed. In his description of the diet of the labourers of his district an investigator of Eure-et-Loire says: "The drink is cider, a cold drink, and this is the reason why coffee and spirits are so much taken". An investigator of Loiret says, "The labourer generally used to drink wine, but the insufficient vintage of recent years has influenced him to take more and more spirits".

It does not seem that employers make much effort to combat the alcoholism of agricultural labourers.

2) *Various expenses (not on diet)*. — The figures obtained by the enquiry as to expenses other than those on diet are given in the table which follows (Table V) and refer to 315 households of agricultural labourers not fed by their employers.

Of the 315 families, 87 or more than a quarter lived in their own houses, twelve enjoyed free lodging, while the others rented their dwellings, the average annual rent being 107 francs or 8 per cent. of income. The proportion spent on taxation and insurance is much the same as in the case of the industrial families, but that going to contributions to syndicates, mutual societies and provision for retirement is much larger. In certain regions (West, Central Massif) these latter contributions seem to be non-existent or quite insignificant.

(1) For industrial workers the corresponding percentage is 23.4.

TABLE V. — *Families of agricultural labourers not fed by employers.*
Average amount in francs of certain expenses unconnected with diet.

Region	Number of		Average annual income	Expenses during the week observed (winter)		Annual expenses			
	families	personal units per family		Heating (1)	Light- ing (1)	Rent (2)	Taxes	Insu- rance	Various expenses
<i>Actual figures.</i>									
I	94	3.7	1,760	2.45	0.92	120	8.10	2.48	5.50
II.	44	3.4	1,215	1.55	0.68	82	13.60	6.30	6.70
III	26	3.8	1,180	1.85	0.63	92	8.85	4.15	5.60
IV	12	3.2	1,276	1.93	0.80	119	6.95	1.52	9.00
V	21	3.7	1,180	1.26	0.57	84	15.30	11.65	8.80
VI	18	3.8	1,139	1.56	0.60	100	14.70	4.30	—
VII	52	3.0	1,106	2.12	0.62	93	11.00	3.90	4.35
VIII.	48	4.0	1,221	1.88	0.74	120	5.90	2.90	1.90
Total . . .	315	3.6	1,353	2.00	0.74	107	10.00	4.15	5.15
<i>Percentage of Income.</i>									
I				4.7	1.8	7.0	0.5	0.1	0.3
II.				4.3	1.9	7.4	1.1	0.5	0.6
III				5.2	1.8	9.0	0.8	0.4	0.5
IV				5.1	2.1	7.7	0.5	0.1	0.7
V				3.6	1.6	7.9	1.3	1.0	0.7
VI				4.7	1.8	7.4	1.3	0.4	—
VII				6.5	1.9	8.4	1.0	0.4	0.4
VIII				5.2	2.0	9.7	0.5	0.2	0.2
Total . . .				5.0	1.9	7.9	0.7	0.3	0.4

(1) In calculating the percentages the annual expenditure was estimated by multiplying the weekly expenditure by 52, and reducing the result by a third since it was a week of winter which was observed.

(2) The average rents refer only to families paying rent for their lodgings. The percentages were calculated by taking as a basis the average income of such families.

§ 4. HOUSING CONDITIONS.

Besides the facts as to the amount of rent and expenses accessory to rent the question form for a family contained information as to methods of housing and the composition and size of dwellings.

Of 456 agricultural labourers' families 137 lived in a separate house as proprietors and 288 as tenants, while 31 lodged in houses shared with others. The percentage lodged in their their own houses was 30 per cent. of the whole number (as against 5 per cent. in the case of the town workers)

The following table, Table VI, classifies households according to the number of their members and the number of rooms in a dwelling. The kitchen which in many of these households serves various purposes has been counted as a room. An entrance hall, where such existed, has not been taken into account. Eighty per cent. of the families of agricultural labourers had dwellings having less than four rooms each, and 18 per cent. had single-room dwellings. If it be admitted that overcrowding should be held to exist wherever a dwelling contains more than two persons for each room, 37.7 per cent. of the lodgings of agricultural labourers will be found to be overcrowded, and 1,118 or 52.2 per cent. of the 2,227 persons in the 456 households to be living in a condition of overcrowding.

TABLE VI. *Distribution of the families of agricultural labourers according to the number of their members and of the rooms in which they are housed.*

Number of members of a family	Number of rooms in a dwelling									Total
	1	2	3	4	5	6	7	8	9	
2.	12	24	18	7	4	—	—	—	—	65
3.	10	23	28	11	1	—	1	—	—	74
4.	11	25	29	10	2	1	—	1	—	79
5.	8	25	25	7	3	—	2	—	—	70
6.	17	21	20	10	2	1	—	—	—	71
7.	7	13	13	6	1	—	—	—	—	40
8.	8	6	9	6	1	—	—	—	—	30
9.	5	2	4	3	1	2	—	—	—	17
10.	—	2	2	—	—	—	—	—	—	4
11.	—	—	1	2	—	—	—	—	—	3
12.	2	—	—	—	—	—	—	—	—	2
13.	1	—	—	—	—	—	—	—	—	1
Total . . .	81	141	149	62	15	4	3	1	—	456

Table VII gives for the households, classified according to the number of their members, the average area of living rooms in relation to dwellings, persons and personal units, and also the number of dwellings having entrance-halls, their own closets, cellars, lofts and gardens. This table proves that as the number of the members of a household increases there is not much proportionate variation in the average area of the dwelling,

so that the average number of square metres (1) per personal unit diminishes very much.

Twenty seven per cent. of the agricultural households have their own closets. Almost all of them have gardens.

TABLE VII. — *Housing conditions of the agricultural labourers' families.*

Number of persons of the household	Number of households or dwellings	Total number of rooms in relation to			Average number of square metres			Number of dwellings having				
		number of dwellings	number of persons	number of personal units	in a dwelling	for each person	for each personal unit	own closet	cellar	loft	entrance-hall	garden
2	65	2.49	1.25	1.38	44.5	22.2	2.47	17	52	60	10	61
3	74	2.65	0.88	1.08	42.4	14.1	17.3	19	50	62	4	69
4	79	2.67	0.67	0.86	43.5	10.9	14.1	24	43	66	6	69
5	70	2.71	0.54	0.76	46.7	9.3	13.1	21	39	60	6	60
6	71	2.48	0.41	0.61	50.2	8.4	12.2	17	41	56	6	62
7	40	2.52	0.36	0.55	42.0	6.0	9.1	15	26	36	6	37
8	30	2.53	0.32	0.48	50.2	6.3	9.5	4	23	28	2	25
9 and more . . .	27	2.78	0.29	0.42	54.5	5.6	8.0	6	16	25	3	26
Total . . .	456	2.60	0.53	0.74	46.0	9.3	13.0	123	290	393	43	409

The enquiry compared the housing conditions of industrial workers in small places, of town working-people and of agricultural labourers, and established that the last named were the worst lodged.

It was the general opinion of the investigators that the progress in the living conditions of country families in the last thirty years has mainly affected their food and clothes, their housing conditions only in a far less degree. Rural dwellings are still very defective in many districts. In Seine-Inférieure it is not uncommon to find a labourer's cottage consisting of a single dark room, and having mud walls and a roof of thatch. Conditions are no better in Finistère and Morbihan although mention is made of improvements there. In Loiret and Sarthe the state of affairs is from a hygienic point of view very unsatisfactory. Conditions seem to be better in Oise and Meuse. In other districts rural dwellings are found to be adequate as regards area but to be, for the most part, in a deplorable condition hygienically.

(1) 1 square metre = 1.196 square yards.

MISCELLANEOUS INFORMATION RELATING TO AGRICULTURAL ECONOMY IN GENERAL.

ARGENTINE REPUBLIC.

THE LANDS OF THE STATE DOMAIN. -- *Revista de la Sociedad Rural de Cordoba*, year XVI, nos. 317 and 318, Cordoba, June 1916.

The *Direccion General del Censo Nacional* has recently published a statement as to the results of the new general census in 1915 of property belonging to the State. We reproduce the following figures which refer to the extent and value of the lands of the domain.

	Lands of the Domain	
	Area	Value
	hectares (1)	pesos (2)
Formosa	7,888,552	63,008,418
Chaco	7,844,383	78,443,838
Misiones	1,271,513	8,900,593
Pampa	1,490,036	11,920,290
Rio Negro	14,123,120	112,984,966
Neuquen	5,667,814	34,006,885
Chubut	18,279,228	91,396,145
Santa Cruz.	19,637,877	98,189,388
Tierra del Fuego	1,541,977	9,251,864
Isla de los Estados	51,000	102,000
Los Andes	5,696,600	11,393,200
Total	83,492,100	519,597,587

From these figures it appears that the average prices assigned to a hectare of land in the different territories were as follows : Formosa, 8 pesos Chaco, 10 pesos ; Misiones, 7 pesos ; Pampa, 8 pesos ; Rio Negro, 8 pesos ; Neuquen, 6 pesos ; Chubut, 5 pesos ; Santa Cruz, 5 pesos ; Tierra del Fuego, 6 pesos ; Isla de los Estados, 2 pesos ; Los Andes, 2 pesos. If the total value of the land in public ownership in 1915, namely 519,597,587 pesos, be compared with that shown by the census of 1888, namely 244,348,600 pesos, an idea of the increase of the value of land in the Argentine Republic can be formed. However in order fully to appreciate the value of the lands of the State it is necessary to remember that while the value as-

(1) 1 hectare = 2.47 hectares.

(2) 1 peso of gold = 4 s at par.

signed to them in 1888 had to be distributed over 132,173,400 hectares that of 1915 referred only to 83,492,100 hectares, for in the interval 48,681,300 hectares passed from public to private ownership, and therefore the average value of a hectare of the public domain was 6.2 pesos in 1915 and only 2 pesos in 1888.

ITALY.

1. RECENT MEASURES FOR DEVELOPING THE GROWING OF CEREALS. — *Gazzetta Ufficiale del Regno d'Italia*, No. 217, Rome, 19 May 1917.

On 10 May 1917 a decree numbered 788 was promulgated which introduced measures for the encouragement of cereal growing and of agriculture in general. It has five clauses of which the second aims at regulating crops. By its provisions agriculturists may give the Ministry of Agriculture (temporary department for supplies) an undertaking, either directly or by the medium of the provincial commissions of agriculture (1), that they will grow corn, other cereals, vegetables and edible tubercles under an obligation to hand over the produce to the State. If such crops be additional to the ordinary crops of a farm, or be grown in face of exceptional difficulties, the price paid by the State may actually surpass the maximum price established by the State, but not by more than 10 per cent.

Special facilities may be granted for the encouragement of these crops, in the form either of agricultural credit, or the grant of prisoners of war for agricultural labour and of the use of agricultural machines.

Further, according to rules to be established by the Ministry of Agriculture, prefects will have the option of compelling, on the advice of the provincial commissions of agriculture, any person occupying a farm on any title to increase the total area on which he grows foodstuffs — corn, other cereals, vegetables and edible tubercles.

Appeal against such action of a prefect may be made within twenty days to the Minister of Agriculture who will pronounce on the advice of a special section of the technical committee of agriculture. Controversies between the owners and farmers of land, which may eventuate in consequence of the prefect's exercise of compulsion, will be settled by three arbiters, namely the praetor as president and two others chosen by the disputing parties.

Any persons who do not obey the prefect's order to increase cultivation will, for each agricultural season in which they disobey, be fined from 50 to 1000 liras for every hectare of land not under its prescribed crop.

Clause III of this decree contains a series of provisions which aim at eliminating the obstacle which current agricultural contracts place in the way of the more intensive growing of corn and other cereals. Some of these

(1) See our issues for October 1916 (page 118) and February 1917 (page 118).

provisions apply to the whole kingdom, those namely which suspend the validity of contracts limiting sowing, and which allow a farmer to bring under cultivation determined lands in order to grow on them cereals, vegetables and edible tubercles, and to vary these crops without regard to the customary rotation.

Other provisions affect only the southern provinces, in which the alternatives of production are more uncertain, and guarantee to the cultivator, to any one cultivating under orders and to any one cultivating a property proportionately to the working capacity of his family, even if he have the aid of a paid staff, a proportionate reduction of rent in the case of accidental losses, that is losses due to circumstances impossible to foresee, together with the annulment of accessory clauses in his lease which give him only a small share of profits. The difficulties which the application of these measures may occasion are regulated by three arbiters, charged to effect an amicable arrangement. There is no appeal from these arbiters.

Clause IV contains interesting provisions as to credit for agriculturists who grow the crops which are the object of the new measures. These provisions concern the capital necessary to the granting of loans to them and also the securities necessary to the success of such operations.

As regards capital, appeal is made not only to the special institutions of agricultural credit, but also to the ordinary and co-operative institutions of credit, the ordinary savings-banks, the *monti di pietà* and *monti frumentarii* and the funds for agricultural loans and advances, in order that they may make advances to agriculturists as largely as possible. The appeals are supported by the State's promise to make advances to these credit institutions when it is necessary to supplement their available resources.

As regards securities, the criterion adopted has a certain novelty, for the series of articles on which the legal agricultural privilege can be exercised has been extended, this privilege having the character of a real charge, properly so called, which burdens the property.

Finally large fiscal facilities complete the system of exceptional and privileged treatment to which loans for the crops which have been mentioned are subject.

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2. THE NEW ORGANIZATION OF THE MINISTRY OF INDUSTRY, COMMERCE AND LABOUR. — *Gazzetta Ufficiale del Regno d'Italia*, No. 106, Rome, 5 May 1917.

By a recent decree measures have been promulgated for the reorganization of the Ministry of Industry, Commerce and Labour in conformity with the various objects at which the creation of this new ministry aimed (1). The following are the chief provisions of the decree :

(1) See our issue for December 1916, page 135.

The former General Direction of Credit and Thrift is reconstituted on a better proportioned system with bureaux established on larger bases and is called the General Direction of Credit, Co-operation and Private Insurance. The departments for social thrift complete the labour bureau, and the union of these services produces the General Direction of Labour and Social Thrift.

The statistical department, hitherto attached to the labour bureau, again becomes a central autonomous bureau. The general inspectorate of industry and industrial education and the general inspectorate of interior trade are co-ordinated, and a new bureau, the bureau of economic policy and foreign trade, is formed, and centralizes all matters regarding the development of national economy which are not the concern of special services. This bureau must use appropriate means and be aided by research and enquiries, thus supporting initiative tending to develop the various industries and the traffic accessory to them. It must observe the facts of economy, industry and trade.

A large part of its programme is taken up with the study of economic and social measures to have force after the war, and the preparation of the measures necessary to the transformation of war industries into peace industries.

The Bureau of General Economy will soon take on the character of a commercial administrative body.

Finally a general secretariat for the whole Ministry of Agriculture will be responsible for the staff and the complex needs of the working of the two ministries.

* * *

3. INSTITUTION OF A PROVINCIAL LABOUR OFFICE AT RAVENNA. — *Bollettino dell'Ufficio del Lavoro*, Number 8, Rome, 16 April 1917.

The provincial administration of Ravenna recently decided to institute a labour office which should have the following programme (1) : to supplement the action of similar offices in the communes of the province and the action of the government labour office ; to study the conditions of labour and workers, of the various industries and of trade and traffic in the province by compiling statistics ; to study the phenomenon of the interior migration and the emigration abroad of labour and make such proposals as the interests of production and of the workers might suggest ; to see that the laws as to labour and hygiene were applied ; to disseminate among workers the spirit of thrift and co-operation ; to study the phenomenon of unemployment and propose methods for remedying it ; to assist the placing of labour by connecting supply and demand and collecting necessary information ; to intervene for purposes of reconciliation in disputes between

(1) As to the provincial labour office lately constituted at Rome see our issue for April 1917, page 112.

capital and labour ; to follow the development of the organizations of workers and employers ; to analyse social relations as affecting strikes, boycotts and lock-outs, determining the causes of these and resuming their development and results ; to favour the development of the trades schools of artisans and workers, and of new industries, agricultural works, and trade and traffic, in the interests of intensified production and of workers ; and finally to help injured workers to take the necessary steps in order to obtain indemnities.

SWITZERLAND.

FEDERAL AID TO SWISS AGRICULTURE. — *Landwirtschaftliches Jahrbuch des Schweiz.* Heft 3. Berne, Wyss, 1916.

Few branches of federal activity provoked as much criticism and discussion, during the years which preceded the war, in the press and in the federal chambers, as the subsidies granted to agriculture. On the one hand the large increase in the sums voted attracted the attention of political and financial circles, and on the other the subsidies were criticized as being in reality a distribution of money to the large farmers from which the country as a whole drew no advantage.

These discussions, sometimes very lively, attracted the attention of the economists and the federal authorities and provoked a careful examination of the subject. On 23 June 1910 the National Council passed the following resolution: " The Federal Council is invited to submit the whole question of federal subsidies to the examination of a commission of experts and to present a report on the subject ". After a sufficiently long period of examination the commission nominated by the Federal Council presented in February 1913 its report in which the grants to agriculture are examined in detail. Proposals aimed above all at obtaining certain modifications of detail, a more stable obligation to grant the subsidies, their greater social importance, and an extension of authority which would allow the results attained by the means of the subsidies in the domain of agricultural improvement to be controlled.

We should also recall in this connection the studies, entitled " L'encouragement à l'agriculture per la Confédération, de 1851 à 1912 " and " Les améliorations foncières en Suisse " and published by the Agricultural Division of the Swiss Department of Public Economy, on the occasion of the National Swiss Exhibition at Berne in 1914.

Further the question of the grants made to agriculture by the Confederation was the subject of a scientific study by Dr. A. Schmid, agronomic engineer at Berne, published *in extenso* in the German edition of the Agricultural Yearbook of Switzerland, No. 3 (1). Dr. Schmid first

(1) *Landwirtschaftliches Jahrbuch des Schweiz*, Heft 3, Wyss, 1916. — *Die landwirtschaftlichen Massnahmen zur Förderung der Landwirtschaft in der Schweiz, insbesondere die Subvention des Bundes*. A. Schmid, pages 257-356, Berne.

glances at the historical development of these grants, and then establishes the bases for an objective estimate of them, reviewing in the principal part of his work each category of agricultural aids and emphasizing the results which have been obtained.

We here reproduce in summarized form his chief conclusions, which we take from the second part of the French edition of the *Agricultural Yearbook of Switzerland* (1).

A. Progress of Financial Aid granted by the Confederation to Agriculture.

	1885 Francs. (2)	1901 Francs.	1910 Francs.	1914 Francs.
Total amount of all federal subsidies. . . .	1,165,398	7,251,548	12,622,385	16,694,221
Total amount of federal subsidies to agriculture.	217,707	1,827,390	3,202,441	4,681,922

It follows from these figures that if grants to agriculture have much increased, the proportion which they bear to the total sum of federal grants has lessened markedly. Other branches of social activity derive equal benefits from federal subsidies.

When the table showing agricultural grants from 1851 to 1912, which is annexed to Dr. Schmid's work, is studied, it becomes clear which branches of agriculture have benefited most by the increase in the grants. From such an examination the following conclusions are drawn :

a) Whereas until 1890 all agricultural subsidies were kept within very modest limits they increased rapidly after 1895, most of them reaching their maximum in 1910.

b) In several branches of agricultural economy the increase in subsidies has been regular but relatively small (small live stock, agricultural associations, insurance against hail, agricultural instruction and experiments). In others it has been on the other hand very large and very rapid (insurance of live stock, insurance against the pests of vineyards, land improvement). Only subsidies to horse-breeding have lessened continuously since 1898.

c) Subsidies to land improvement, the insurance of live stock, the campaign against diseases of the vine, and cattle-breeding have, especially since 1905, much surpassed those to other branches of agriculture. The indisputable results obtained by subsidies in the spheres of land improvement and cattle-breeding have contributed to their increase. As regards the subsidies to the insurance of live stock and the campaign against di-

(1) *Annuaire agricole de la Suisse*, 2nd part, Berne, Wyss, 1916. — *Les subventions fédérales en faveur de l'agriculture*. Extract from a study by Dr. A. Schmid, published in the German edition of the *Agricultural yearbook of Switzerland*.

(2) 1 francs = 9 $\frac{3}{8}$ d at par.

seases of the vine they are not only an encouragement but also a veritable aid to small agriculturalists to meet losses which they are powerless to prevent and which are a direct menace to their economic existence. These grants are a true social benefit.

The author of the work we have cited has also made a study of the distributions of cash prizes awarded by the federal government to encourage cattle breeding on a large and a small scale in the canton of Berne (1), in which there is a relatively great number of large stock owners. The study has reference to 1913 and ends with the following conclusions :

Distribution of cash prizes to exhibitors winning from 1 to 8 prizes for males and females.

Number of prizes obtained	Percent. of total no. of exhibitors	Percent. of total amount constituted by amount of prizes in each category
1	54.46 %	27.44 %
2	19.26 %	16.91 %
3	10.14 %	11.56 %
4	4.00 %	5.87 %
5	2.92 %	5.06 %
6	2.60 %	6.16 %
7	2.32 %	5.87 %
8	4.30 %	21.13 %
	100.00 %	100.00 %

It is especially in the chief breeding centres that proprietors of the last category are encountered. To have in one's stalls eight heads of live stock is not to be a large proprietor. Farms of this description, having a certain importance, form the centres for serious breeding which are necessary to its methodical and rational pursuit. Therefore the federal subsidies are not, as has often been said, so much money distributed to rich peasants. Especially where cattle are concerned they are useful and render real services.

B. Influence of federal subsidies on agriculture and their future development.

The conclusions reached by Dr. Schmid as to *agricultural instruction, agricultural experiment and research, stock breeding, land improvement, measures for the protection of agriculture, agricultural associations, the Swiss peasants' secretariat, exhibitions, etc.*

To resume the conclusions of the author of this study on all these subjects would take us too far. We will end this notice by giving in tabular form the data as to federal subsidies for the encouragement of agriculture

(1) See table XV. and the remarks on pp. 316 et seq of the work cited in the *Landwirtschaftliches Jahrbuch des Schweiz*, part 3, 1916.

from 1851 to 1912, in accordance with the various branches of activity exercised.

	Average annual costs					
	From	1871-80	1881-90	1891-1900	1901-10	1911-12
Agricultural societies	(1) 1859	15,735	37,752	63,600	97,298	110,000
Horses	(2) 1864	19,777	60,635	354,485	398,217	369,380
Cattle	1879	3,287	72,129	322,362	497,597	592,534
Diseases of the vine	1879	5,201	92,912	112,997	311,077	758,211
Agricultural instruction . . .	1885	—	73,173	161,643	238,834	286,009
Agricultural experiment . . .	1885	—	16,059	91,411	336,270	409,089
Land improvement	1885	—	14,750	192,185	574,568	1,500,000
Insurance against hail	1890	—	28,264	106,908	164,760	246,903
Small live stock	1893	—	—	18,720	31,198	49,049
Insurance of live stock	1895	—	—	125,589	512,413	894,456

(1) 1859-60 — 5,000 Fr. (2) 1864-70 — 10,000 Fr.

1861-70 — 15,310 Fr.

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(d) Publications of the Bureau of Economic and Social Intelligence.

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Part I: Co-operation and Association

UNITED STATES.

FARMERS' CO-OPERATIVE ELEVATORS IN MINNESOTA.

OFFICIAL SOURCE :

DURAND (E. Dana), Chief of Division of Research in Agricultural Economics at the University of Minnesota, and JENSEN (J.P.), Student Assistant : FARMERS' ELEVATORS IN MINNESOTA, The University of Minnesota, Agricultural Experiment Station, Bulletin 164, St. Paul, October 1916 .

The development and working of the farmers' co-operative elevators in Minnesota has been the subject of special study on the part of the division of research in agricultural economics in the university of Minnesota.

The facts we give are taken from a bulletin of this division, based on certain of the reports which the co-operative organizations in Minnesota are bound by law to render annually to the State university. The reports in question cover in most cases business done between 1 July 1914 and 30 June 1915.

§ 1. NUMBER AND KIND OF CO-OPERATIVE ELEVATORS.

The number of co-operative elevators in Minnesota is gradually increasing. The line of distinction between them and other elevators is not always sharply drawn. It has been deemed proper to include with them all elevators in which farmers own at least 50 per cent. of the capital stock. Under this definition there were 296 co-operative elevators in the State on 1 January 1916, that is about one fifth of the total number of elevators and local mills buying grain from farmers.

The Minnesota Railroad and Warehouse Commission, to which all elevators and other concerns handling grain are required to report, includes in its list of local establishments mills buying grain from farmers as well as elevators proper. On 1 January 1916 this list included 1,428 concerns,

of which however it is probable that a few had been closed and a few were mentioned in duplicate owing to change of ownership. Terminal elevators were not included. Of the 1,428 concerns 248 were mills and therefore 1,180 elevators proper, and almost exactly a fourth of these last were co-operative elevators.

The elevators are classed as co-operative, line and individual. Line elevators are those owned by concerns having headquarters in central markets, while "individual" is the term used to designate the elevators locally owned which are not co-operative, even if, as in a good many cases, they are owned not by individuals but by firms or even corporations.

The elevators in the 73 counties of the State were classified as follows :

Co-operative elevators	296
Line elevators	625
Individual elevators	302
Mills	205
<hr/>	
Total	1,428

While some of the 296 elevators called co-operative do not possess all the characteristics and pursue all the practices generally considered appropriate to co-operative enterprise, they are all substantially controlled by farmers; and the large majority possess some, and many all, of the customary characteristics of a co-operative organization. In most of them each stockholder has one vote, whatever amount of capital stock he may own. In many of them there is a limit to the number of shares of stock one person may own. In a considerable number the dividends on stocks are limited and the remaining profits are distributed on a patronage basis.

Of the 296 co-operative elevators information as to the year in which they were organized is available for 204 and is given in Table I. In a good many cases the present officers of farmers' elevators do not know when their elevator was organized. The significance of the reports is affected in some other cases by the fact that one or more reorganizations have taken place, and it is not certain whether the date given is that of the first organization or the latest reorganization. Nevertheless the table gives a fair idea of the growth of the co-operative elevator system in the State. The great majority of elevators have been organized since 1900. One dates back to 1876 and another to 1884, but the total number reported as organized before 1900 is only thirty. Marked activity in the formation of co-operative elevators appears from 1904 to 1906 and again from 1912 to 1914, the years 1912 and 1913 showing a greater number organized than any others. Comparatively few seem to have been organized in 1915, but this may be partly due to the absence of reports from the newest concerns

TABLE I. — *Year of Organization of 204 Co-operative Farmers' Elevators*

Year	Number of Elevators	Year	Number of Elevators
1876	1	1901	6
1884	1	1902	2
1885	2	1903	6
1886	1	1904	10
1887	1	1905	16
1889	4	1906	16
1890	2	1907	7
1893	2	1908	9
1894	3	1909	11
1895	2	1910	10
1896	3	1911	15
1897	3	1912	22
1898	4	1913	21
1899	1	1914	14
1900	4	1915	5

As would naturally be expected there are in general more co-operative elevators in regions of large grain production than elsewhere. The south-western part of the State grows more grain than any other except the Red River Valley, and co-operative elevators are particularly numerous in it. In the Red River Valley however, a great grain region, they are comparatively few. Their small number in counties adjoining the Twin Cities and in the entire north-eastern part of the State is chiefly attributable to the small local grain production. The earliest co-operative grain elevators in Minnesota appear to have been organized in the middle western counties.

§ 2. ACTIVITY OF THE CO-OPERATIVE ELEVATORS.

a) *Quantity of Grain Received.* — The 1,428 local elevators and mills buying grain from farmers reported to the State Railroad and Warehouse Commission that they handled approximately 112,000,000 bushels of grain during the season 1914-1915. *Of this amount the co-operative elevators handled over 43,000,000 bushels or nearly two fifths.*

The proportion of the business in grain done by the co-operative elevators varies greatly in different parts of the State. In one county, Clearwater, it is all done by them. On the other hand in fifteen counties no co-operative elevators are reported to exist. In several of the counties of south-western Minnesota, all important in grain production, the co-operative elevators do half of the business or more, but they do as much as 50 per cent. in only few of the counties of south-eastern, central or north-western Minnesota.

It does not appear that there is a very close relation between the date at which farmers' elevators were first organized in a given county and the proportion of the business they now control there; but the fact that in the south-eastern part of the State and in the Red River Valley generally they have much less than half of the total business may possibly be connected with the fact that comparatively few of them were organized in these regions before 1900. No sufficient information is at present available to indicate the reasons for the variation in the relative importance of co-operative elevators in the several parts of the State. Doubtless it is affected to some extent by the nationality of the farming population, by the degree of mixture of different nationalities, and by the policies of the non-co-operative elevators in dealing with grain growers, as well as by numerous other factors.

It is noteworthy that the co-operative elevators are larger than the other concerns or at any rate do a larger volume of business. As already stated the 296 elevators classed as co-operative handled 43,489,000 bushels in 1914-1915 or an average of 148,000 bushels each. Approximately 1,130 other elevators and mills buying grain from farmers handled about 68,000,000 bushels, or an average of 60,000 bushels each. If mills were excluded the average for proprietary elevators would perhaps be somewhat larger, but it is safe to say that on an average each co-operative elevator does at least twice as much business as each proprietary concern. Although no information is available as to the cost of operating proprietary elevators, it seems probable that, on account of their smaller business, their expenses per unit of grain handled are higher than those of the co-operative elevators.

b). *Membership.* — Although the reports were not complete, the total number of stockholders using the elevators in 1915 may be placed approximately at 33,000 or an average of about 112 to a company. There are however an average of eighty-five persons for each elevator, or a total for all the elevators of about 25,000 persons, who make use of them and yet are not stockholders. This brings the total number of persons using them to about 58,000 or an average of nearly 200 for each elevator. The total number of farmers in the State in 1910 was about 156,000. As it is probably little changed, considerably over one third of the farmers may be said to do business with the co-operative elevators.

c) *Capital Stock and Gross Receipts.* — Practically all the farmers' elevators are organized as stock corporations, mostly under the general corporation law and not the special law authorizing the organization of co-operative corporations. The amount of capital stock varies greatly and is by no means always proportionate to the volume of business. Table II classifies according to the amount of their stock thirty-eight companies which reported on this point. The average capital stock for all the companies is about \$65,000

TABLE II. -- *Relation of Capital Stock to Gross Receipts.*

Classification (according to gross receipts)	Number of elevators	Percentage of capital stock to gross receipts		
		Maximum	Minimum	Average
Less than \$ 50,000	5	59.0	4.8	25.0
\$ 50,000 to 100,000	10	11.3	4.2	5.8
100,000 to 150,000	12	6.7	2.3	4.8
150,000 to 200,000	6	4.6	2.1	3.1
Over 200,000	5	8.0	2.6	4.7

On an average the capital stock is equal to 5 per cent. of the gross receipts. In few if any cases is the co-operative elevator fully financed by the subscribed capital stock. Other sources, such as banks, individual lenders and commission men, generally provide the greater part of the working capital, the capital stock being usually intended to cover the cost of the plant and equipment.

d) *Gross Receipts and Operating Expenses.* — It is interesting to compare the ratio of operating expenses to gross receipts from all sources, for the companies classified according to the volume of their business. This is done in Table III on the basis of the reports for the year 1914-1915. Figures sufficiently complete and accurate were available in the case of only 166 elevators, but their conditions are probably substantially representative of those of all the co-operative elevators. They are classed in eleven groups, according to the volume of their business as indicated by their gross receipts. It will be seen that 107, the large majority, have gross receipts ranging from \$50,000 to \$150,000 a year. The average gross receipts of the 166 elevators amount to \$122,000. On an average operating expenses amount to 2.6 per cent. of gross receipts. While within each class of elevators the ratio of expenses to receipts varies widely, in nearly all cases the column showing the highest ratio of operating expenses to gross receipts indicates a fall in this ratio with each increase in the volume of business. It will be noted that after the limit of \$150,000 of gross receipts has been passed there is no considerable change in this ratio until the class of elevators having gross receipts in excess of \$275,000 is reached. In other words, as the business increases from a very small to a moderate size the ratio of expenses falls rapidly, but with further increase in volume it naturally becomes more difficult to effect the comparative reduction of expenses. Volume is not the only element which effects the ratio of expenses. The kind of business done is also, doubtless, a factor of some importance. Elevators which handle relatively more of the products necessitating considerable expense will naturally have comparatively higher working costs than

those which deal chiefly with products easily handled. The skill of individual managers also of course accounts for much.

TABLE III. *Relation of Operating Expenses to Gross Receipts.*

Classification (according to gross receipts)	Number of elevators in each class	Percentage of operating expenses to gross receipts		
		Maximum	Minimum	Average
\$ 10,000 — 50,000	15	16.2	2.8	5.3
50,000 — 75,000	27	9.6	2.1	3.6
75,000 — 100,000	30	7.0	1.9	3.3
100,000 — 125,000	24	5.0	1.8	2.7
125,000 — 150,000	26	3.8	1.4	2.2
150,000 — 175,000	13	3.5	1.1	2.0
175,000 — 200,000	9	2.9	1.5	2.1
200,000 — 225,000	6	3.4	1.1	2.2
225,000 — 250,000	6	2.7	1.5	2.1
250,000 — 275,000	5	2.7	1.4	2.0
275,000 and over	5	3.3	1.0	1.6
All classes	166	16.2	1.0	2.6

e) *Profits.* — Profits as such — an excess of total income over total outgoings — are not necessarily desirable for a co-operative organization. The object of a strictly co-operative marketing business is to enable the co-operators to obtain the highest possible amount for the goods they market; and whether this is accomplished by paying them directly the whole price obtained, less expenses, or by retaining a share of such price for subsequent distribution in the form of dividends, is immaterial. It is the practice of the co-operative creameries to pay for butter-fat the whole current price at which the butter sells, less actual working costs, so that at the end of the year little or no profit remains to be divided.

Such a policy is however scarcely practicable in the case of the co-operative marketing of grain, particularly because of the considerable and rapid fluctuations of the price of grain which often take place, and the considerable occasional variations in working expenses which are due to the varying volume of business. It is desirable that the co-operative elevators should retain, after paying suppliers of grain and immediate working expenses, a margin of receipts. This serves as a safety fund.

As a matter of fact, not all the farmers' elevators are strictly co-opera-

tive in their methods of doing business. A good many of them are controlled by stockholders who desire as high returns as possible on their investment, and a good many do not limit dividends.

In the case of 169 elevators reporting on this point the average profit was 2.7 per cent: it varied from 1.9 per cent. for the nine having gross receipts between \$ 175,000 and \$ 200,000 to 3.5 per cent. for the seven having gross receipts between \$ 225,000 and \$ 250,000. It may perhaps be concluded on the whole that the smaller elevators tend to require a somewhat greater proportion of profit than the larger. This may be due to the fact that elevators doing a small volume of business require relatively more investment per unit of business than those doing more, and in order to obtain an equal rate of return must collect a larger rate of profit on business handled.

The methods of distributing profits in the form of *dividends* vary very much. Where sufficient profit is made to declare any dividend a stock dividend is almost invariably paid. Of the 296 elevators we are considering 72 made no statement as to their disposition of profits, 36 reported that they paid no dividend of any kind, 111 that they paid dividends on stock only, and 77 that they distributed their profits among those delivering grain. Of these 77 all but one paid a stock dividend before any distribution was made on business done.

Table IV shows the rates of dividends on stock paid by the 147 elevators which reported and which did not pay dividends to those delivering grain.

TABLE IV. — *Dividend Rates on Capital Stock.*

Rate %	Number of elevators	Rate %	Number of elevators
0	36	20	12
1	2	25	5
5	5	28	1
6	4	30	4
7	6	32	1
8	16	40	2
8 $\frac{1}{3}$	1	43 $\frac{1}{2}$	1
10	36	50	3
12	1	100	5
15	4	250	1
16	1		

Thus of the 147 elevators 76 distributed 10 per cent. or more of their capital stock in dividends and 36 paid no dividends at all.

Probably some of the very high dividends represent in part the earnings of earlier years or are due to the fact that the capital stock is only a small part of the actual capital of the companies. In some cases the high dividends are justified because for many previous years no dividend or only low and irregular dividends have been declared. However there is little doubt that a high return to capital is put by a good many elevators before the interests of those supplying the grain.

About 77 elevators reported paying to the latter a dividend, called a "patronage dividend". The apportionment of patronage dividend admits of many variations. Some elevators limit its distribution to stockholders, while others, apparently more numerous, distribute it to all customers. A variation in this practice, which is however rare, is to pay a patronage dividend to stockholders at double the rate at which it is paid to non-stockholders. In all except possibly one of the cases in which elevators pay a patronage dividend, there is a limit placed on the stock dividend which may be paid. This limit varies from 2 to 15 per cent., but 10 per cent. seems to be the most general figure and is apparently held to represent a just return, in the circumstances, on the capital invested. In general there seems to be no evidence that the claim of stock to dividends is cumulative. The patronage dividend is distributed according to several different systems. There is first the straight dividend, distributed on the basis of the value of the business done, whether it has been buying or selling. Where buying and selling are done on approximately equal margins this method seems to be adequate. Another practice is to pay a patronage dividend as a percentage on the value of business, on grain and flax only; and where other commodities are distributed at a lower profit than grain and flax this method may be justified. According to yet another method the dividend takes the form of a specific number of cents per bushel of grain, the difference in the value of the different kinds of grain or the profit on them per bushel being sometimes disregarded. Such a dividend may be distributed on other commodities than grain and flax, such as coal, flour and fodder.

The actual amount of patronage dividends naturally varies very much. The highest rate reported is 5 per cent. on business done; and unless peculiar local conditions necessitate transacting business on a larger margin there is no good reason why this rate should ever be exceeded. Rather than surpass it, farmers should be paid higher prices for their products or be allowed to buy commodities more cheaply, so that too much money would not be tied up in the funds of the elevator.

In general it can be said that in the countries in which the practice of paying a patronage dividend prevails, the percentage of foreign-born citizens and citizens having foreign-born parents is considerably above the average; and it is suggested that these citizens may have become familiar with this practice in Europe and have continued it. As a rule the larger

and more successful co-operative elevators are those which pay patronage dividends.

It will be remembered that only 55 per cent. of all the patrons of elevators are stockholders. In the case of many elevators this percentage is much less, several of them reporting their non-stockholding to be far more numerous than their stockholding patrons. When in such a case a large stock dividend is declared -- as happened in several instances -- the returns from products handled for patrons are not distributed in strict accordance with co-operative principles.

TABLE V. -- *Dividend Rates for Elevators paying Patronage Dividend to all Customers.*

Elevator number	Stock dividend paid	Patronage dividend to all customers
	%	%
1	10	1.3
2	10	1.7
3	10	2.0
4	8	2.5
5	8	2.5
6	8	4.0
7	6	3.0
8	5	3.75
9	5	4.0 (Paid to stockholders only)

f) *Gross Margins.* -- The average gross margin between price paid and price received for products handled by all elevators reporting on this point is 5.3 per cent. of the gross receipts, the proportion varying from 8 per cent. in the case of elevators having gross receipts less than \$50,000 to 4 per cent. in some of the larger classes. For all the reporting elevators the gross margin is almost equally divided between profits and expenses, 51 per cent. going to the former and 49 per cent. to the latter. For the three classes which have the smallest volume of business, however, the expense constitutes over one half of the margin; for all but two of the other classes less than half the margin. In the case of elevators having gross receipts over \$275,000 the expense forms only one third of the margin and the profits two thirds. It is evident that co-operative elevators having a small volume of business must find it more difficult to compete with non-co-operative elevators than those having a large volume of business. Because their expenses are relatively higher, and because they must seek a larger ratio of profit on sales, their gross margins must be materially higher than those

of the larger elevators ; and since they can hardly sell their grain for more, this means that they must pay farmers less.

g) *Capacity of Elevators.* — The capacity of the co-operative elevators varies considerably, the average being about 22,750 bushels. Some elevators have a capacity of as much as 50,000 bushels, and there is a tendency to replace with larger structures the older and smaller elevators which become unprofitable in course of time.

The average quantity of grain and flax handled by these elevators in 1914-1915 was five and a half times as much as their average capacity.

§ 3. COMMODITIES OTHER THAN GRAIN HANDLED BY THE CO-OPERATIVE ELEVATORS.

The majority of the co-operative elevators handle commodities other than grain. They distribute more or less frequently coal, seeds, fodder, twine, wood, tile, salt, flour, lumber, cement, oils, fencing and machinery. Of the entire number of elevators 24 reported that they handled nothing but grain and flax, and 149 specified that they handled other products than these.

TABLE VI. — *Farmers' Elevators buying Commodities for Patrons.*

Commodity	Number of elevators
Coal	112
Fodder	88
Flour	71
Twine	51
Salt	30
Seeds	17
Machinery	13
Wood	9
Lumber	9
Tile	8
Cement	4
Fencing	3
Oil	3

Table VII classifies the 173 co-operative elevators reporting on this point according to the proportion of their total receipts derived from sources other than grain and flax. The receipts from these other sources of two fifths of these elevators exceeded 10 per cent. of their total receipts ; those of twenty-three of them exceeded 20 per cent. of their total receipts.

TABLE VII. — *Percentage of Gross Receipts from Commodities other than Grain and Flax.*

Per cent.	Number of elevators
More than 50	1
40 to 50	5
30 to 40	6
20 to 30	11
15 to 20	12
10 to 15	24
5 to 10	50
Under 5	40
None	24
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It appears that those elevators which handle relatively large amounts of commodities in addition to grain and flax require, on an average, a slightly larger gross margin than do others.

RUSSIA.

THE RUSSIAN CO-OPERATIVE MOVEMENT DURING THE WAR.

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§ I. THE DEVELOPMENT OF CO-OPERATION IN GENERAL.

The war has given a vigorous impulse to co-operation in Russia where since the outbreak of hostilities the co-operative movement has been exceptional in the history of the world. A mere comparison of the data for 1914 with those for 1916 shows very clearly the importance of this development.

As appears in the following table the number of co-operative societies of certain categories has been almost doubled while that of those of all categories has increased by more than 60 per cent.

TABLE I. — *Number of Co-operative Societies from 1914 to 1917.*

Kind of Societies	Number of Societies in the year				Percentage of increase in Number of Societies	
	1914	1915	1916	1917	1914	1917
Co-operative credit . . .	12,985	14,586	15,436	16,055	100	182
Co-operative consumption	10,080	12,000	18,000	20,000	100	198
Agricultural	4,707	5,795	5,820	6,132	100	176
Co-operative agricultural	1,278	1,278	1,981	2,100	100	161
Co-operative butter factories	2,000	2,000	2,500	3,000	100	166
Total . . .	31,050	35,659	43,737	47,287	100	166

As regards the number of members there were about ten millions of them on 1 January 1914. If the population of Russia be taken to be 172 millions, 5.8 per cent. of them are co-operators. If to these be added the other members of co-operators' families, on an average six persons for each, it is found that 34.8 per cent. of the population are closely connected with the co-operative movement.

In 1916 the number of members increased in an extraordinary way. A figure of no less than fifteen millions was reached or, if members of co-operators' families be counted, 67,500,000 ; which is to say that 39 per cent. of the population were interested in the co-operative movement.

The detailed analysis of the movement is even more striking, especially if co-operation for credit and consumption be considered in particular.

§ 2. CO-OPERATIVE CREDIT.

The most important branch of Russian co-operation is without doubt co-operation for credit. On 1 January 1917 there were 21,263 institutions of small credit distributed as follows : 11,810 credit societies ; 4,245 savings and relief funds ; 76 unions ; 4,860 small credit funds belonging to the zemstvos.

If these data be compared with those for 1915 and 1916 the following table, showing the development of institutions of small credit during the war, is obtained :

TABLE II. — *Number of Institutions of Small Credit from 1915 to 1917.*

Institutions of Small Credit	Years		
	1915	1916	1917
<i>Co-operative Institutions :</i>			
1) Credit and Savings	3,515	4,042	4,245
2) Credit	9,516	11,412	11,810
3) Credit Unions	11	62	76
<i>Non-co-operative Institutions :</i>			
1) Funds of the Zemstvos.	203	248	272
2) Special Funds	5,192	4,998	4,860

We have added to the co-operative institutions of credit the small credit funds of the zemstvos, for these discharge almost exclusively the task of unions of co-operative credit institutions. In this connection the grave question has lately arisen of limiting the fields of action of the unions and the small-credit funds.

As appear from Table II the total number of co-operative credit institutions has certainly increased, but not very markedly. Thus in 1914

1482 new co-operative institutions were organized, only 888 in 1915 and 601 in 1916.

This relatively weak development is explained by the fact that during the war co-operation for credit has directed all its efforts towards organizing unions, by means of which it has been able to exercise a multiple and intense activity. The large decrease in loans to members and the increase in deposits have allowed the members to develop a series of various forms of co-operative action which did not previously exist. Co-operation for credit has been drawn into the sphere of co-operative consumption, has taken a very active part in supplying the army with various products, and has participated in a growing movement for the creation of co-operative industries. At the outbreak of war only eleven unions, or one for every 1,324 societies, existed; but in 1916 they already numbered sixty-two, that is one for every 249 societies; and on 1 January 1917 there were eighty-eight of them — twelve being mixed unions — that is one for every 181 societies. This increase would have been far larger had twenty-five other unions, who applied to the competent authorities for authorization during 1916, been authorized to begin operations.

On the basis only of very incomplete data, which are below the actual level reached, it can be concluded that the unions for co-operative credit supplied to the army in 1915-1916 the following quantities of agricultural products:

41,427,544 puds (1) of corn;	5,734,684 puds of hay;
2,488,798 " " flour;	272,663 " " buckwheat.

The co-operative institutions of the province of Charkov alone supplied hay, sacks, leather, buckwheat, etc. to the value of more than two million roubles (2); and those of Astrakhan about twenty million roubles' worth of fish.

At the same time co-operation was driven to set up factories for the construction and repair of agricultural machines and implements. This form of co-operative production was provoked and stimulated on the one hand by the lack of agricultural machines which resulted from the difficulties of importation, and on the other by the increased demand for machines arising from the insufficiency of labour caused by the mobilization. The co-operative credit institutions had therefore to organize factories and workshops for the making of agricultural machines and implements.

Their unions took the lead in this enterprise because they could most easily find the necessary capital. Co-operative industrial activity did not however confine itself to making the machines necessary to agriculture: it began to fabricate other articles, especially those for which agriculture furnishes the primary material.

Mills were set up and also machines for the essication of fruit and vegetables.

(1) 1 pud = 40 lbs.

(2) 1 rouble = about 2s 1d. at par.

In 1914 and 1915 these miscellaneous undertakings were as follows :

TABLE III. — *Various Co-operative Activity in 1914 and 1915.*

Operations	1914		1915	
	Number of Societies	Total Sum. — roubles	Number of Societies	Total Sum. — roubles
Supply of agricultural machines. .	2,472	9,727,400	3,105	13,094,600
Supply of live stock	53	130,600	74	500,100
Seeds	756	2,569,400	1,177	5,172,500
Forage	350	1,598,000	754	4,147,600
Letting lands	94	631,500	50	263,400

The credit granted by the State to institutions of small credit amounted on 1 January 1917 to 397 millions roubles, of which 358 million roubles had been granted to co-operative institutions of credit.

The number of members on 1 July 1916 was 10,378,913; namely 2,324,988 members of credit and relief societies and 8,053,925 members of co-operative credit institutions. The increase in 1914 was of 1,200,000; in 1915 it was only of 100,000.

The capital of which the institutions of small credit could dispose was distributed as follows.

TABLE IV. *Percentage of Capital at the Disposal of the Institutions of Small Credit of various Categories.*

Kinds of Capital.	Credit and Relief Societies.	Co-operative Credit Societies.	Co-operative Societies of the two Forms.
Capital belonging to the Societies	22.8	13.7	17.9
Capital of the State . .	6.0	13.2	9.6
Capital of the Zemstvos	1.6	4.6	3.3
Deposited capital . . .	67.2	65.4	66.3
Other capital	2.4	3.4	2.9
Total . . .	361,280,000	554,314,000	915,544,000 roubles

§ 3. CO-OPERATIVE CONSUMPTION.

The total number of co-operative institutions for consumption reached 18,000 on 1 January 1917 while before the war it was barely 10,000, the increase being thus one of nearly 100 per cent. In European Russia the increase was of 98 per cent., in Siberia of 99 per cent., in the Caucasus of 164 per cent., and in the Transcaspian provinces of 171 per cent. In certain provinces the percentage of increase was very high: in the province of Nijni-Novgorod it was 709; in the province of Charkov 447.

The development of co-operation for consumption in the other chief States of Europe was as follows :

TABLE V. — *Number of Co-operative Institutions of Consumption in the Chief States of Europe.*

Country	Total Number of Institutions
Great Britain	1,375
Germany	2,500
Denmark	1,562
Switzerland	736
Italy	2,570
France	3,156
Total.	11,899

It is reckoned that in other countries there are about 8,000 co-operative institutions of consumption. The total number of them in Europe outside Russia therefore hardly surpasses that in Russia only. The total number of members was five millions, and if members of co-operators' families be counted no less than 25 millions of the inhabitants of Russia will be found to be included in the co-operative movement.

It is interesting to compare this with the development of co-operative consumers' societies in the rest of Europe.

TABLE VI. — *Absolute and Comparative Figures as to the Development of Co-operative Institutions of Consumption in the Chief States of Europe.*

Countries.	Number of Members..	Percentage of Population who are Members.	Percentage of Population who are interested in Co-operation.
Great Britain. . .	3,362,000	8.0	32.0
Switzerland . . .	523,000	14.0	56.0
Denmark.	243,000	8.0	35.0
Germany.	2,500,000	3.6	14.5
France	876,179	2.1	8.4
Italy	500,000	1.4	5.6
Russia	5,000,000	3.0	15.0

This importance and development of the movement towards co-operative consumption in Russia has a direct relation to the war. Co-operation in consumption did not arise when the war broke out nor was it a consequence of the war. The work of propaganda and organization certainly went on for twenty years. But the true success and veritable national importance of this form of co-operation date only from quite recent years and are a result of the pressure exercised by the crisis in the food supply. According to information, very incomplete and therefore below the truth, which dates from 1916 the turnover of this branch of co-operation was then fifteen hundred million roubles.

A movement parallel to that of co-operation is found in the organization of unions of districts, provinces, regions and of a central union. On 1 January 1917 the unions of co-operative institutions for consumption numbered 250, of which 170 had been formed in the previous year. They are largely mixed in type and unite co-operative institutions of various categories.

The number of co-operative institutions belonging to the unions has increased at an exceptional rate. The Union of Co-operative Societies of Moscow, which is becoming the centre of co-operative consumption in Russia and is on the point of solving the problem of forming a single national co-operative institution for consumption, had 1,734 members in 1915 and 3,164 in 1916. The membership of the Union of Vologda increased from 222 to 600; that of Perm, which was formed of thirteen societies in 1912, included 500 of them in 1916, 308 having joined during 1916, etc.

The total number of co-operative societies grouped in the unions was 4,000 on 1 January 1916 and 12,500 on 1 January 1917, which is to say that no less than 60 per cent. of the co-operative consumers' societies have adhered to the unions. The turnover of all the unions was 257 million roubles on 1 January 1917 as against 70 million in 1915. The Union of the Co-operative Societies of Moscow should be signalized, its turnover having surpassed even optimistic anticipations. In 1914 the value of the goods it sold was 10 million roubles, in 1915 it was 22.8 million roubles, in 1916 it surpassed 85 million, and this year it will, on a modest computation, reach 145,568,500 roubles, thus placing the union in the first rank of the co-operative stores of the whole world.

As appears from the following table the large majority of Russian co-operative societies are rural. To analyse in detail the activity of the Central Union of Russian Co-operative Societies, by which name the Union of Moscow is now known, is therefore of the highest importance for the study of the economic and commercial life of the Russian country.

TABLE VII. — *Relation between the whole Number of Co-operative Institutions and those of the Various Categories.*

Categories	Total Number	Percent of Total
Co-operative Urban	486	73 %
" Rural	2,063	
" Factory	220	
" Special	51	
" Labourers	50	
" Railway	30	
" Various	114	
Unions of Co-operative Institutions	154	

The Muscovite union expects in the current year a turnover of 145,568,500 roubles, distributed as follows: commercial action 131,420,000 roubles; production 11,131,000 roubles; propaganda action 3,017,500 roubles. In comparison with the results of previous years these previsions are moderate for they involve an increase of only 68 per cent. Their moderate character is confirmed by the results of the first years. The increase was of 122 per cent. in 1915 and of 280 per cent. in 1916.

Another circumstance should be noticed. In 1916 co-operative consumption organized itself for the first time and on a large scale. It founded one chemical establishment; four soap factories; four factories of confectionery; four establishments for the treatment of leather; tobacco, match, preserved fish and paper factories; establishments for the treatment of wood and sunflower oil; mineral water works, printing-presses; and a number of mills. The anticipations of the Central Union left out of account the large mills bought in the first months of 1917 and a number of enterprises of various kinds.

On parallel lines to this organization, which operates from outside inwards, that operating from inside outwards has grown and been reinforced during the war. The Central Union founds, at points chosen in advance and likely, owing to their geographical position, to be active trading centres, a number of agencies having stores for wholesale goods, and these agencies form nuclei always closely connected with the Central Union. They have the double aim of supplying the co-operative institutions with wholesale warehouses, and buying local products for the Central Union without the intervention of middlemen. Middlemen used more than any other element to burden enterprise in Russia.

There were seven of these agencies in 1916 and twelve in 1917. Their turnover in 1916 was very large, that of the Agency of Rostov being 257 per cent. of its amount in the previous year, that of the Kiev Agency 179.8 per cent., that of the Odessa Agency 255.5 per cent., that of the Rybinsk Agency 589 per cent., and that of the Astrakhan Agency 2,351 per cent. For the current year a turnover of 44,700,000 roubles is anticipated,

The activity of the Central Union as regards the fish trade deserves special attention. In 1917 it bought two large refrigerators, a steamer and ten barges which it had built on purpose for the transport of fish, thus preparing for the sale of 250,000 puds of fish emanating from European Russia. It also organized the purchase in Siberia.

What is even more interesting is the great success which met the union's effort to concentrate the trade in butter, cheese, eggs, pork, etc.

§ 4. CO-OPERATIVE AGRICULTURE.

On 1 January 1915 there were 1,768 agricultural co-operative institutions. On 1 January 1916 their total number was 1883 and on 1 August 1916 it was 1981. Thus in one year it increased by 213 or 12 per cent. Most of the new institutions, that is 91 out of the 158 formed in 1916, are collective dairies. The slight development of agricultural as compared with other co-operative institutions is entirely symptomatic. In this branch of co-operation an increase above the normal rate was provoked by the war as elsewhere. On 1 January 1914 there were 1316 of these institutions, and on 1 August 1916 there were 1981 of them, so that the increase during the war was of 665 or 50.6 per cent. In spite of their almost absolute lack of technical and financial aid, agricultural co-operative institutions have shown their solidity and their great power of resistance to economic and social repercussions. Their initiative has however been checked by their lack of means of their own, which has constrained them to borrow a sum more than six times the amount of their capital-shares and reserve fund.

§ 5. CO-OPERATIVE BUTTERMAKING.

The statistics of co-operative buttermaking are among the most incomplete. The most exact refer to eight provinces — Arkangelsk, Vologda, Viatka, Kostroma, Novgorod, Olenetzk, Perm and Jaroslav — and give the following data as to the development of co-operative butter-factories :

TABLE VIII. — *Numerical Increase of Co-operative Butter Factories in Eight Provinces from 1914 to 1916.*

	Year			Percent. of Increase
	1914	1915	1916	
Co-operative institutions in general	4,302	4,895	6,528	34
Co-operative butter-factories . . .	286	408	540	47

As to co-operative butter-factories in Siberia we have the following data. In the province of Tomsk there were 114 of them in 1914, 497 in 1915 and 1038 in 1916; in the province of Tobolsk there were 1200 of them in

1916. The unions had a really exceptional development. During the war twenty-seven unions were formed in Siberia where before the war there were only three of them. Of these twenty-seven, ten were unions of co-operative butter factories. The tendency to centralization was however affected by many and various repercussions tending to produce a crisis in the work of organization. In 1915 the Union of Altaï, comprising 100 societies, left the Siberian Union which now comprises 800 societies; and during the last months of 1916 another autonomous union was organized at Kurgan. Besides these associations there were many in the provinces of Moscow, Orenburg and Oufa. There were 3,000 co-operative buttermaking associations in all Russia in 1916.

Latterly the question of the organization of the National Central Union of Co-operative Buttermaking Associations has arisen, for the Siberian co-operative factories have begun to extend their sphere and to make butter not only for exporting abroad but also for the home market. Dangerous competition in the field of commerce with the Union of Vologda has thus arisen.

Another question, much discussed, involves the work of various branches of co-operation, the question namely of the National Co-operative Union for the Export of Corn. A further step for the development and reinforcement of Russian co-operative enterprise is about to be made here this year.

NOTICES RELATING TO CO-OPERATION AND ASSOCIATION IN VARIOUS COUNTRIES.

AUSTRIA.

BERICHT ÜBER DIE TÄTIGKEIT DER K. K. LANDWIRTSCHAFTSGESELLSCHAFT
IN WIEN WÄHREND DER KRIEGSZEIT 1914, 1915 UND 1916 (*Report on the Activity
of the Imperial and Royal Agricultural Society in Vienna during Wartime 1914, 1915 and
1916*). — Published by the Zentral-Ausschuss (*Central Council*) and edited by the General
Secretary, Professor J. Häusler. 43 pp. Vienna 1916.

Owing to financial reasons and a diminished staff the Imperial and Royal Society of Agriculture of Vienna has suspended for the period of the war the publication of its yearbook, and issued instead a brief report on the society's activity from the outbreak of war until the end of July 1916. In the first part of this report the activity of the Central Council and the sections is examined, in the second that of the various offices.

Since the beginning of the war the society has been occupied by questions relative to the work necessary to saving the harvests which the lack of labour has jeopardized, and to this end has become part of organisms created by the government, and studied the problems concerned with the production and distribution of cereals and forage. It has attempted to support and represent the interests of agriculturists in face of the numerous decrees and ordinances of an economic character which have so strongly affected rural economy and the circulation of products. In this connection we should notice its efforts to ensure that in the several sowing seasons there should be the necessary quantities of seeds, to assist the transport of beetroot, to secure the supply of milk and other agricultural products, and to fix the price of milk. The society further intervenes in the Ministry of Justice when questions inherent in the rise of prices consequent on speculation are at stake. A large sphere for very useful action was provided by the important problem of the rural labour supply. The society was able to act as intermediary between agriculture and the prisoners of war and concentration camps for refugees, thus procuring labour.

The society has also been occupied by the problem of finding homes for soldiers returned from the war (*Kriegerheimstätten*). The task reserved for agriculture after the war has been lengthily studied from the points of view of legislation, technique and finance. The society's propaganda in favour of the essication of potatoes has also been most useful: here it has been possible even to put schemes into practice, plans and devices for the construction of essicating establishments having been actually executed.

In the matter of providing food-substitutes the society has been equally active.

Mention should also be made of lectures on the principles of diet, given or organized in order to demonstrate the necessity of adapting consumption to the exigencies of war and to the new products intended as foods. Efforts made to increase kitchen-gardening were no less important: seeds were actually distributed free of cost; gardening was superintended; and produce was carried to the market. The problem of unemployment was closely studied with the help of the society's labour bureau.

The second part of the report is given up to the various offices or departments of the general secretariat. The office of information has a department occupied by questions inherent in tariffs; a department of administration is devoted to the funds and the book-keeping; and there are a labour office, an office for the sale of milk, an office concerned with feeding live stock, an office for agricultural machinery, and an office for alimentary products which was created in October 1914. We must add to these the offices of the library and museum, the editorial office of the society's agricultural journal, and the office of its archives.

RUSSIA.

RUBENOFF (S. V.): *THE CO-OPERATIVE MOVEMENT IN RUSSIA: ITS HISTORY, SIGNIFICANCE AND CHARACTER*. Published by the "Russian Co-operator", 83, Finsbury Pavement London E. C. 2. 1917; 162 pp.; 37 illustrations.

This book contains a mass of exact and detailed information on the great co-operative movement in Russia, which is playing such an important part in the economic life of that country. The author gives also a general review of the state of agriculture in Russia, which is still primarily an agricultural country, the agricultural classes supplying the main backbone of the co-operative movement.

The scope of the work of the author can be gauged from the contents of the book, which we give below:

Chapter I. — Agricultural Russia:

- 1) General Review.
- 2) Progress of the Peasants' Small Holdings.

Chapter II. — The Co-operative Movement:

- 1) General Remarks.
- 2) Forms of Organization:
 - a) Artels — Labour Artels, Kustar Artels.
 - b) Agricultural Societies.
 - c) Consumers' Societies.
 - d) Credit Societies.

Chapter III. — Co-operative Unions:

- 1) The Building-up of Co-operative Unions:
- 2) Unions of Credit Societies.

3) Unions of Consumers' Societies.

4) Agricultural Unions.

Chapter IV. — Some Co-operative Associations:

1) The Union of Tar Artels.

2) The Union of the Siberian Creamery Associations.

3) The Moscow Union of Consumers' Societies.

Chapter V. — Co-operative Banks:

1) The Moscow Narodny Bank.

2) The Warsaw Co-operative Bank.

Chapter VI. — Institutions for Promoting and Assisting Co-operation:

1) The Role of the Zemstvos.

2) Co-operative Committees and other Institutions.

3) The Co-operative Congresses.

Chapter VII. — Some other Aspects of Co-operation:

1) Educational Work.

2) People's Palaces.

3) The Legal Position.

Chapter VIII. — The War and the Co-operative Movement:

1) The General Effect of the War.

2) The War and the Village.

3) The Latest Period.

Chapter IX.

1) International Tendencies of Russian Co-operation.

2) The Idea of International Co-operative Exchange.

Part II: Insurance and Thrift

MISCELLANEOUS INFORMATION RELATING TO INSURANCE AND THRIFT IN VARIOUS COUNTRIES.

CANADA.

1. AGRICULTURAL INSURANCE IN SASKATCHEWAN IN 1916. — *Canadian Finance*, Vol. VIII, No. 12, pp. 466 and 467, Winnipeg, 20 June 1917.

The following tables give data as to the chief types of insurance in Saskatchewan, and allow the business in 1916 of the companies for mutual insurance of live stock and against fire, hail and tornados to be estimated.

I. — *Mutual Fire Insurance Companies - 1916.*

Name of Company	Premiums & Assesments Received — \$	Indemnities Paid — \$
Arcola Mutual Fire Insurance Company . . .	5,228.47	6,846.23
Germania Mutual Fire Insurance Company .	1,430.90	2,944.30
Miniota Farmers' Mutual Fire Insurance Company	14,185.35	15,506.82
Retail Lumbermen's Mutual Fire Insurance Company	10,533.50	9,741.52
Retail Merchants' Mutual Fire Insurance Com- pany	12,073.74	494.48
Saskatoon Mutual Fire Insurance Company .	50,624.63	22,031.40
Wawanesa Mutual Insurance Company . . .	104,673.24	53,449.600
Total . . .	198,749.83	111,014.35

II. — *Hail Insurance - 1916.*

Name of Company	Premiums \$	Indemnities \$
Acadia Fire Insurance Company	31,824.16	70,411.22
American Central Insurance Company . .	8,908.96	24,972.85
British America Assce. Company	46,864.77	63,077.05
British Crown Assce. Company	225,694.59	215,579.27
Canadian Indemnity Company	73,412.22	110,402.26
Canadian Hail Insurance Company . . .	72,542.95	95,127.67
Canada National Insurance Company Limited	73,096.46	124,876.02
Canada Security Assurance Company . .	88,802.95	87,441.97
Canada Weather Insurance Company . .	23,552.35	14,990.13
Connecticut Fire Insurance Company . .	14,072.66	4,277.24
Dominion Fire Insurance Company . . .	34,775.69	25,023.75
Excess Insurance Company	102,437.76	131,190.84
Great North Insurance Company	76,234.48	58,929.83
Glens Fall Insurance Company	78,036.44	75,646.67
Home Insurance Company	102,607.55	176,806.91
Hartford Fire Insurance Company	96,360.96	80,140.14
Middle West Insurance Company	39,662.35	49,990.94
Nova Scotia Fire Underwriters	9,657.87	11,623.67
New York Underwriters Agency	25,624.42	30,785.44
Northwestern National Insurance Company	99,493.23	113,717.35
Rochester Underwriters' Agency	18,110.29	29,964.44
St. Paul Fire and Marine Insurance Company	54,802.10	86,548.43
Winnipeg Fire Underwriters' Agency . .	3,150.96	3,887.50
Westchester Fire Insurance Company . .	32,015.96	7,997.97
Total . . . 1916	1,431,742.13	1,693,291.25
Corresponding total for 1915	1,363,001.66	438,619.57

III. — *Live Stock Insurance - 1916.*

Name of Company	Premiums \$	Indemnities \$
General Animals Insurance Company	8,013.03	3,365.00
Great North Insurance Company	5,192.55	350.00
Yorkshire Insurance Company	2,567.20	824.00
Total . . . 1916	15,772.78	4,539.00
Corresponding total for 1915	10,125.05	7,427.80

IV. — *Tornado Insurance.*

Name of Company —	Premiums \$ —	Indemnities \$ —
American Central Insurance Company	494.51	690.06
Aetna Insurance Company	1,370.67	—
Canada Weather Insurance Company	624.04	3,018.00
Canada National Insurance Company Limited .	11.00	—
Fidelity Phenix Fire Insurance Company . . .	487.36	—
Firemen's Insurance Company	37.50	—
German American Insurance Company	321.22	—
Glens Falls Insurance Company	768.09	—
Hartford Fire Insurance Company	1,379.14	483.28
Home Insurance Company	815.78	85.00
Insurance Company of the State of Pennsylvania	429.88	177.20
Mercantile Fire and Marine Underwriters, Agency of the American Central Insurance Company .	147.99	2.87
Minnesota Underwriters' Agency of the St. Paul Fire and Marine Insurance Company	99.50	48.10
National Fire Insurance Company of Hartford .	747.25	82.17
National Union Fire Insurance Company . . .	331.25	59.00
Northwestern National Insurance Company . .	639.90	32.50
New York Underwriters' Agency	2,645.58	1,160.27
Scottish Union and National Insurance Company	369.40	—
Springfield Fire and Marine Insurance Company	2,936.16	783.28
St. Paul Fire and Marine Insurance Company .	5,131.23	5,215.27
Underwriters' Agency of the Firemen's Insurance Company of Newark	10.00	—
Total . . . 1916	19,797.45	11,837.00
Corresponding total in 1915	14,357.55	456.38

* * *

2. PREVENTION OF FOREST FIRES.

Canada lost \$ 9,000,000 by forest fires in 1916, more than six times as much as had been spent on forest protection work. Most of these fires were preventable.

In *British Columbia* the effect of an efficient forest-protection service and somewhat more favourable weather conditions was to reduce the number of fires to about half their number in the previous year. Yet a substantial loss was suffered and a better protection service would have been profitable.

The presence of a protective force, trails, and look-out towers connected with headquarters by telephone, enables fires to be effectively tackled when

they do break out. A more important and a really preventive measure is to curtail the quantity of dry material on the forest floor, thus reducing the danger of fire, and so diminishing the heat of such fires as do occur that they cause less injury to the trees and soil.

The lumbering "slash" makes such a hot fire as to render the outlook for the next tree crop very poor. The tree seedlings and the uncut trees are generally destroyed or very much damaged. A most important part of forestry is to dispose of this "slash" as soon as possible after the lumbering work is done. In this the lumber companies have been urged to co-operate with the forest service.

Many destructive fires have been caused by the careless methods of settlers who burn the "slash" they produce while clearing land. The advice now give to them by fire rangers and the permit system have reduced this danger.

The protective work done by the railway companies, under regulations issued by the Board of Railway Commissions, as to clearing rights of way, constructing fire guards, patrolling the line during the dry season, etc., has been effective. This legislation requires the railway companies to extinguish fires within 300 feet of the railway unless they can show that they did not cause the fire. The principle is that the railway companies must protect the public against damage by railway fires.

The *Ontario* legislature has passed a law to preserve the forests of the province against destruction by fire. It provides for the creation of fire districts, and for a close season within which fires shall not be made in the districts except under permit and under the close supervision of an official. It also provides for the appointment of a provincial forester.

Under the bill the northern country is to be divided into three fire areas or districts and a supervisor appointed to have charge of each of these. A fire chief and fire rangers are to be under him.

A new departure has been made by the Land, Forest and Mines Department in entirely undertaking forest protection. It will be responsible for the execution of the Act, and make a charge on the licensees and holders of permits as a contribution towards the protection of their interests.

The new Act is expected to prevent such disastrous fires as those of 1910, 1911 and 1916, in which many lives were sacrificed and many square miles of timber razed.

In *Saskatchewan* the sixth session of the third legislature modified an earlier law on fires within the prairie zone, adding to it provision for forests in accordance with the recommendations of the Canadian Forestry Association.

As regards burning the waste remaining after forest land has been cleared whether for the purpose a of railway, a private road, a telegraph or a telephone line, or of cultivation, the law dictates certain precautions. If waste cannot be destroyed at once its destruction must take place between the following 15 November and 1 April. Between 1 April and 15 November there can be no such burning, without a written permit from the forest guard, within a radius of six miles of a Dominion forest reserve, nor

— with some exceptions — can it take place in the region north of township 50. Such permit can be refused if there is danger that the fire will spread or if necessary precautions have not been taken.

The act provides that in rural districts and unorganized districts there shall be agents responsible for preventing and dealing with fires. The execution of the Act is entrusted to a provincial fire Commission.

UNITED STATES.

1. INSURANCE AGAINST FROST IN IOWA. — *The Country Gentleman*, Vol. LXXXII, No. 10. Philadelphia, 10 March 1917.

After collecting the greatest possible number of data as to meteorological conditions in different States the Weather Bureau of the United States has advocated insurance against the risks of bad weather, especially of unseasonable frosts.

It has been recognized that societies undertaking such insurance should, in order to have a secure foundation for their business, establish it on a ten years' basis. In other words policies should be for ten years, the risk of loss being approximately nine to one. The following table shows the results obtained in ten years by a company insuring against spring frosts in two States :

		Premium Payment	Losses	Reserve and Operating Account
		—	—	—
	Capital			\$ 100,000
1906	{ Ohio	\$ 5,900	\$ 2,000	1,700
	{ Kansas	5,400	11,000	<u> </u>
	Balance			98,300
1907	{ Ohio	5,900	22,000	49,700
	{ Kansas	5,400	39,000	<u> </u>
	Balance			48,600
1908	{ Ohio.	5,900	none	10,300
	{ Kansas	5,400	1,000	<u> </u>
	Balance			58,900
1909	{ Ohio.	5,900	none	11,300
	{ Kansas	5,400	none	<u> </u>
	Balance			70,200

		Premium Payment	Losses	Reserve and Operations Account
		—	—	—
1910	{ Ohio	5,900	1,000	
	{ Kansas	5,400	none	10,300
	Balance			80,500
1911	{ Ohio	5,900	none	
	{ Kansas	5,400	none	11,300
	Balance			91,800
1912	{ Ohio	5,900	7,000	
	{ Kansas	5,400	1,000	3,300
	Balance			95,100
1913	{ Ohio	5,900	none	
	{ Kansas	5,400	8,000	3,300
	Balance			98,400
1914	{ Ohio	5,900	none	
	{ Kansas	5,400	3,000	8,300
	Balance			106,700
1915	{ Ohio	5,900	2,000	
	{ Kansans	4,400	3,000	6,300
	Balance			113,000

This company insured fifty-nine places in Ohio and fifty-four in Kansas against killing frost, after a date named in each policy which was determined for each place on the basis of the records of the Weather Bureau. The date selected was four days later than that which was the latest date of a killing frost, in 90 per cent. of all the years for which a record has been kept, in the place in question. The margin of four days is necessary to cover the cost of doing business and to provide a small reserve for prompt payments.

The following tables show, by way of example, the rates demanded in a single county by companies insuring, respectively, against spring and autumn frosts :

1. *Weatherwise Insurance Company of Kansas City, Kansas.*

Rates per \$ 1000 on Spring Frost.

If killing frost occurs on or after		Annual premium per \$1,000
April	20	\$ 490
"	25	334
"	30	200
May	5	100
"	10	44
"	15	17
"	20	5
"	25	1

For hillsides (not hilltops) 200-400 feet above the valley subtract from the given rate 3 per cent. for north slopes, 5 per cent. for south slopes. For valley bottoms less than 5 miles wide add to the given rate 10 per cent.

2. *The Frostproof Insurance Company of Sioux City, Iowa.*

Amounts Payable for \$1000 Annual Premium - Autumn Frost.

When killing frost occurs before		The payment is]
September	15	\$ 575
"	20	225
"	25	100
"	30	50
October	5	30
"	10	20

For valley bottoms subtract 12 per cent. from the amount payable. For slopes at least 200 feet above the valley bottom and at least 100 feet below the hilltop add 5 per cent. to the amount payable.

* * *

2. **MUTUAL, AGRICULTURAL, INSURANCE AGAINST WINDSTORMS IN ILLINOIS. —**
Forty-seventh Annual Insurance Report of the Insurance Superintendent of the State of Illinois 31 December 1914.

The mutual companies for insurance against windstorms are divided in Illinois into classes — the district companies, active only within a number of counties not more than five; and the county companies which are active only in single counties. There were on 31 December 1914 four of the former and eight of the latter.

The following are some data as to their business in 1914:

	County Companies	District Companies
Risks written during year	\$ 402,082.00 *	\$ 8,387.097.00
Total income	3,992.12	47,897.77
Losses paid	1,837.49	13,804.04
All other expenditure	1,736.37	24,570.81
Total expenditure	3,573.86	38,374.85
Cash Assets	754.39	127,523.87
Liabilities	951.19	215.00
Risks in force at end of year	2,054,716.00 *	34,253,256.00
Number of risks written	305 *	4,231
Number of risks in force.	1,570 *	18,293

(*) On 1 October 1914.

Part III: Credit

RUSSIA.

THE ACTIVITY OF THE PEASANTS' LAND BANK.

OFFICIAL SOURCES:

Отчеты крестьянского земельного банка (*Reports of the Peasants' Land Bank*). Petrograd, 1907-1915.

Дѣятельность крестьянского земельного банка (*Activity of the Peasants' Land Bank*) Resumed reports published annually in the weekly official review of the Ministry of Finances "Вѣстникъ финансовъ, промышленности и Торговли". Petrograd, 1907-1916.

О покупке крестьянскимъ земельнымъ банкомъ ликвидируемыхъ земель непріятельскихъ поданныхъ и выходцевъ (*Purchase by the Peasants' Land Bank of lands belonging to subjects of enemy countries and banished persons*), in the review "Вѣстникъ финансовъ, промышленности и Торговли". (*Messenger of Finances, Industry and Commerce*), No. 27. Petrograd, 1916.

OTHER SOURCES:

Движеніе земельного запаса крестьянского банка (*The Transference of Lands belonging to the Bank of the Agriculturists*) in the review Земледѣльческая Газета (*The Journal of Agriculture*), No. 31, 1916.

LA BANQUE IMPÉRIALE FONCIÈRE DES PAYSANS (*The Peasants' Imperial Land Bank*). Chambre de Commerce russe de Paris, 1913.

The year 1915 virtually ended the third and most important period of the activity of the Peasants' Land Bank. In view of the diminution of its activity, which as a consequence of the war was much and increasingly emphasized, its operations in 1916 could not in any way influence the results of this third period; and in 1917 landed property was, as is known, forbidden by the government to change lands by way either of sales or of gifts. The bank's operations in the matter of selling land to peasants were therefore interrupted if not suppressed. Moreover, in accordance with the declarations of the government, this bank and the Bank of the Nobility were transformed into a single land bank, open no longer to citizens of cer-

tain categories but to all of them indiscriminately ; and thus the third period may be considered as having ended in 1915 and we can examine it as being already in the past. Therefore the report for 1915 as compared with those for 1907-1914 has a very great interest for the student of the most important agrarian reform of the twentieth century.

The activity of the Peasants' Land Bank in the period we have mentioned was determined by a series of laws and circulars which radically changed its policy. From 1882 to 1895 the bank confined itself to accepting mortgages on the lands which the peasants bought by private contract from the landed proprietors. From 1896 to 1906 it took on the added function of purchasing lands directly to sell them to the peasants. The third period begins with the decree of 9 November 1905 by which the bank received the right to issue unlimited bonds for the purchase — which took place frequently — of lands belonging to individuals. The laws of 12 and 27 August concentrated in the bank the great mass of the *oudiel* or crown lands and the State lands. This enormous area — for the extent of the lands intended for sale to the peasants had thus been increased — was destined in particular for the creation of peasants' individual properties. The ensuing laws contributed to the realization of this aim, for they granted special advantages to peasants who acquired land in individual proprietorship — as for example under the law of 1907 ; encouraged collective property to disappear by giving the bank the right to accept mortgages of *nadial* lands which had been inalienable (law of 15 November 1906) ; and allowed the usufructories of the *mir* to demand the conversion of their shares into private property (law of 9 November 1906).

§ I. PURCHASE OF LANDS.

The number of properties sold to the bank in 1915 was eighty-six and they had a total area of 105,950 deciatines (1). The bank approved the purchase of forty-six properties, extending over 50,179 deciatines ; and twenty of these, having an aggregate area of 17,835 deciatines, were actually bought, the bank paying for them 2,074,062 roubles (2) or an average of 116 roubles a deciatine.

The following table gives an exact idea of the general development of the purchase of lands during the third period.

(1) 1 deciatine = 2.698 acres. (2) 1 rouble = about 2s 1 ½ d. at par.

TABLE I. — *Number and Total Area of Properties Bought from 1906 to 1915.*

Year	Total Number of properties bought by the Bank	Total Area of lands bought — deciatines
1906	700	1,144,464
1907	1,191	1,519,547
1908	465	572,082
1909	189	172,842
1910	185	172,189
1911	135	196,227
1912	125	146,544
1913	174	301,194
1914	76	83,503
1915	10	17,835
Total . . .	3,260	4,346,427

If the last figure as to purchases be compared with those of the years 1913 and 1914 a strong and progressive retrogression in this business will be noted, which confirms our statement that the third and last period of activity of the agriculturists' bank virtually ended in 1915.

It should be noted that 74.9 per cent. of the total area was bought by the bank between 1906 and 1908. The grave economic and social crisis which characterizes this period was a strong stimulus to purchase. The majority of proprietors were convinced that expropriation was near at hand, and therefore they were anxious to sell. The peasants for the same reason refused to buy. Moreover some of the proprietors were unable to derive any profit from their farms which the revolted peasants had devastated, and therefore wished to be rid of them. In receiving the right to issue unlimited bonds the bank may be said to have met the desires of proprietors by buying their lands and thus accumulating the power to dispose of a large area. This was followed by the re-establishment of order and fine harvests. The diminution of business resulted from the previous purchase of properties economically weak. The year 1913, in which the agitation in the country recommenced, was marked by a renewed increase of purchases which was stopped only by the war.

The following table gives an exact idea of the motives for the bank's purchase of lands.

TABLE II. — *Total Value of Properties Bought by the Bank*

Year	Total value of properties bought — roubles	Motives of sale —
1906	127,364,147	political
1907	186,218,534	political
1908	107,786,703	political
1909	30,093,023	partly political
1910	18,722,362	economic
1911	11,857,676	economic
1912	11,940,686	economic
1913	31,362,119	partly political
1914	11,385,285	economic
1915	2,074,062	economic
Total	538,804,597	

Of the properties bought by the bank in 1915 only three belonged to individuals (two to the nobility) ; seven belonged to *bashkiri* and the others to subjects of countries at war with Russia and those banished from these countries.

The total results of this third period give the following table :

TABLE III. — *Percentage of the Properties Sold to the Bank belonging to each of the Several Categories.*

Year	Nobility		Commerce		Middle class		Peasants		Various		Total
	% of number sold	% of area sold	% of number sold	% of area sold	% of number sold	% of area sold	% of number sold	% of area sold	% of number sold	% of area sold	
1906	75.4	77.4	10.1	14.2	1.8	0.4	3.8	1.7	8.8	6.2	100
1907	82.2	79.9	8.3	12.8	2.4	1.0	4.1	3.5	3.0	2.8	100
1909	84.2	90.5	6.3	5.0	4.2	2.7	2.7	0.8	2.6	1.0	100
1910	69.2	58.2	4.8	20.3	10.3	5.7	10.3	13.6	5.4	2.2	100
1911	44.4	23.0	7.4	5.5	3.7	1.1	40.8 *	65.4 *	3.7	5.0	100
1912	45.6	55.6	3.2	3.6	7.2	4.8	39.2 *	28.8 *	4.8	7.2	100
1913	39.6	43.8	12.5	12.4	8.6	3.0	34.5 *	19.6 *	4.8	2.2	100
1914	50.7	41.9	11.0	18.1	5.5	2.4	27.3 *	36.5 *	5.5	1.1	100
1915	10.0	4.0	0.0	0.0	0.0	0.0	60.0	57.2	40.0	38.0	100

(*) Lands of the *bashkiri* or natives of the eastern steppes, occupied by primitive stock-farming.

This table shows that in the first years the nobles formed the large majority of proprietors selling their lands. Their category and that of the traders and the various sellers, most of whom belonged to one of the two former classes, included almost all the sellers. Afterwards the percentage of nobles tended to be lowered and to yield place to that of peasants. The percentage of nobles would always have remained very high if the purchase had not been initiated of lands of the *bashkiri*, on whose steppes many lands intended for Russian settlers were sold, after regular shares had been assigned to the *bashkiri*. If the lands of the *bashkiri* be excluded the percentage of peasants selling their lands is very low and that of the hereditary nobility doing so is very high.

If we compare the enormous extent of 4,346,427 deciatines, worth 538,804,597 roubles, bought by the bank in this third period (1906-1915), with the bank's purchases from 1882 to 1906 which were of 961,487 deciatines worth 68,183,124 roubles, we must allow that in this branch of its activity it realized in this period a great development.

§ 2. CESSION OF "OUDIÉL" LANDS.

To the land bought by the bank from individuals was added that ceded to it by the administration of the *oudiel* (crown lands) by the decree of 12 August 1906. A total area of 1, 258,089 deciatines, costing 70,788,438 roubles, was thus ceded. In 1915, 428 deciatines were ceded for 19,888 roubles.

5,604,436 deciatines, costing 609,593,035 roubles, thus passed to the bank in the third period.

§ 3. PROPERTIES REMAINING TO THE BANK AFTER AUCTIONS.

In 1915, in view of the difficulties of wartime, the bank had recourse, in cases of extreme necessity only, to public auctions of the properties for which due sums had not been paid. Delays were granted in the case of all properties situated in the invaded districts and the neighbourhood of the zone of military operations, that is in eighteen provinces. In other districts the bank, before decreeing an auction, investigated the causes of delays and held no auctions where these were serious, as in the case of defective harvests or lack of labour.

Nevertheless 62,984 properties were put up for auction. Of them 55,080 having an area of 668,512 deciatines, were in private ownership; 5,925, having an area of 1,175,444 deciatines, belonged to co-operative associations; and 1,149, having an area of 573,803 deciatines, belonged to rural communes. These lands represented 15.2 per cent. of the total mortgaged area; and 16.9 per cent. of those in private ownership, 12.4 per cent. of those owned by

rural communes, and 8.1 per cent. of those owned by peasants' societies. 60,892 properties put up for auction, or 96.7 per cent. of them, were withdrawn, either because the debtors paid their arrears (in 37,449 cases), or because the bank made some concession or simply granted a prorogation (20,839 cases) or for other and various reasons (2,604 cases). Of the remaining 2,092 properties 91 were sold by auction and the other 1,990 remained to the bank. The following table gives a complete idea of the sales by auction in this third period.

TABLE IV. — *Number of Properties sold by Public Auction in the Third Period.*

Year	Number of properties sold by auction	% of total lands mortgaged	Total area of lands sold — deciatines	% of total area of lands mortgaged
1915	91	0.022	1,415	0.008
1914	75	0.018	1,399	0.007
1913	127	0.038	3,125	0.020
1912	69	0.024	1,538	0.010
1911	31	0.015	1,144	0.009
1910	26	0.019	740	0.007
1909	25	0.029	4,412	0.014
1908	11	0.016	2,966	0.033
1907	12	0.019	2,633	0.032

The following table is significant. It shows the number of properties put up for public auction and the number of such which were left to the bank from 1907 to 1915.

TABLE V. — *Sales by Public Auction from 1907 to 1915.*

Year	Number of properties put up for auction	% of mortgaged properties	Number of properties not sold	% of mortgaged properties
1915	2,092	0.51	1,990	0.49
1914	847	0.23	745	0.20
1913	1,295	0.37	1,085	0.33
1912	690	0.24	603	0.21
1911	256	0.12	218	0.10
1910	223	0.16	196	0.14
1909	206	0.30	241	0.28
1908	333	0.50	321	0.48
1907	463	0.74	450	0.12

The great increase in the number of properties left to the bank after auctions is the result of a very interesting circumstance. According to the report of 1915, it is explained by the fact that "in the first months of the activity which tended to a vast development of individual property, the rural population regarded this tendency rather coolly. It was therefore impossible to secure the desired choice of purchasers and some of the lands passed to peasants whose economic situation was too weak. The bank, when it perceived that it was absolutely impossible for these peasants to carry on well the farming they had undertaken, was constrained, after having granted many facilities to the purchasers, to put these lands up for auction".

In other words the first aim of the reform of 1907 was the creation at all costs of individual property in order to split up the compact mass of the *mir*; and, as a more detailed analysis will show, the formation of a certain class of peasant proprietors was only a secondary aim.

This third period and the activity which preceded it left to the bank hundreds of thousands of deciatines, emanating from purchasers not fulfilling their obligations in time, in spite of the various facilities granted to them; and this is on the whole an unfavourable indication of the bank's land policy.

Thus the following table shows that while from 1887 to 1905 only 273,006 deciatines, worth altogether 17,762,653 roubles, were left to the bank; within a far shorter period the area not sold, when put up for public auction, was 566,562 deciatines, having a total value of 65,635,445 roubles.

TABLE VI. — *Total Area and Mortgage Debt of Lands left with the Bank.*

Year	Number of properties	Total Area — deciatines	Mortgages burdening the properties — roubles
1887-1905	272	273,006	17,762,653
1906	217	51,550	4,008,460
1907	381	158,946	11,730,829
1908	241	132,672	10,400,000
1909	170	53,069	5,131,834
1910	223	23,459	1,934,473
1911	218	18,810	1,483,173
1912	591	28,580	2,679,574
1913	965	34,560	3,029,388
1914	729	16,950	1,694,158
1915	1748	47,966	5,781,003

The influence of the bank's vast purchase of lands caused the price of lands to rise to an unprecedented level, and therefore the peasants were

obliged to pay sums which were sometimes a real obstacle to the improvement of agriculture.

The general course of the purchasing prices established by the bank was as follows :

TABLE VII. — *Average Price Paid by the Bank for each Deciatine of land bought from Individuals.*

Year	Average price	Average price excluding lands of the <i>bashkiri</i>
1906	108	108
1907	105	105
1908	96	96
1909	113	136
1910	113	130
1911	92	114
1912	85	102
1913	86	—
1914	127	140
1915	171	176

During the years which preceded the third period the bank bought lands at a lower price. In 1904 the average price of a deciatine was 69 roubles, in 1915 it was 94 roubles. The average price from 1893 to 1905 was only 71 roubles while from 1906 to 1915 it reached 122.4 roubles.

It should be added that while the price increased owing to the largeness of purchases, the bank could sell the lands of which it disposed at a lower price than that which the peasants paid to the proprietors when they bought directly and without the bank's aid.

§ 4. SALES OF THE BANK'S REAL ESTATE.

As a result of its large purchases of lands the bank concentrated in its own ownership 5,919,222 deciatines, of which the larger part was bought in the first three years of the third period. Immediately afterwards sales increased and purchases diminished. The lands bought at a high price, often when the peasants had depreciated them, represented a pure loss for the bank's administration, and profits derived from those of them which the bank held temporarily were always very much less than the percentages which had to be paid to possessors of the bonds the bank had issued. In the beginning of the period examined, on 12 June 1907, the circular of the committee for the regulation of the agrarian question asserted that "every delay in the sale of the real estate is undesirable, from the point of view both of finances and of the regularization of the agrarian question".

This brings us to the examination of the bank's activity as applied to the liquidation of its lands.

Operations of this kind in 1915 were of the smallest importance. The war and the change in economic life consequent on the war could not influence their course. In 1914 a diminution of sales had been noticed. In 1915 it was even more marked, sales of this kind ceasing altogether in districts which were or are within the theatre of military operations.

In the first place the undertakings preliminary to this liquidation diminished. 106,823 deciatines were divided into lots in 1915 as against 206,629 in 1914 and 210,475 in 1913.

The great work of preparing the land for sale, the redistribution of the lots of one tenant or unification of the parcels forming *houters*, the provision of a sufficient water-supply and the arrangement or construction of roads, are all included in the following table ;

TABLE VIII. — *Operations Preparatory to the Sale of Lands.*

Year	Area to which approved plans for liquidation are applied	Area engrossed by works of preparation
—	deciatines	deciatines
1907	795,168	740,831
1908	1,539,820	1,184,375
1909	1,083,730	1,281,071
1910	563,422	564,880
1911	361,495	352,543
1912	264,182	260,265
1913	274,458	210,475
1914	221,930	206,649
1915	116,092	106,823
Total . . .	5,220,297	4,748,339

As appears from this table 73.7 per cent. of the total area belonging to the bank and 95 per cent. of the area for which plans for rearrangement were approved up to 1 January 1916, have been completely arranged for sale.

This area should be reduced by 255,702 deciatines, for which the relevant plans have been changed. Therefore during nine years plans have been approved for the arrangement of 4,964,595 deciatines or 77 per cent. of the whole area belonging to the bank.

Side by side with these works others were undertaken, works of improvement and irrigation.

In 1915, 357 wells were sunk and 59 previously in existence were re-made; 90 basins were constructed; and 4,500 deciatines of land, in which 75 kilometres of canal were dug, were improved. Other works, such as the strengthening of banks and making of bridges, were also executed. The total cost of these works was 1,401,307 roubles as against 2,250,490 roubles in 1914, giving a reduction of 37.7 per cent.

The following table shows that 7,747 wells and 2,868 basins were dug and 213,500 deciatines of land were improved between 1909 and 1915.

TABLE IX. — *Works of Arrangement and Improvement executed in the Period 1909-1915.*

Year	Wells	Basins and dikes	Lands improved deciatines
1909.	1,625	450	25,000
1910.	2,034	529	55,000
1911.	1,788	763	59,000
1912.	1,082	902	54,000
1914.	861	134	16,000
1915.	357	90	4,500
Total . . .	7,747	2,868	213,500

The area intended for liquidation in 1915 was 887,625 deciatines of which 528,729 deciatines had been arranged in previous years; 31,457 deciatines were intended to be sold without being arranged; and 106,823 deciatines were arranged in 1915. In the case of 48 per cent. or about 403,910 deciatines the procedure for liquidation was begun to be applied, but at the end of the year it had been concluded for only 137,216 deciatines as against 315,785 in 1914 and 441,370 in 1913.

As the bank's activity was applied principally to the formation of individual properties, a large part of these lands actually passed to private ownership.

In the period in question 903,581 deciatines of *houtor* and 2,128,960 deciatines of *otroub* land were sold, of which only 351,582 deciatines passed to collective ownership. The lands sold from 1908 to 1915 were distributed as follows among the various categories of purchasers:

TABLE X. — *Lands sold by the Bank from 1908 to 1915 (deciatines).*

	1908	1909	1910	1911	1912	1913	1914	1915	Total
Private persons . . .	432,075	848,078	819,508	548,062	341,367	286,886	197,901	52,788	3,576,665
Rural Societies . . .	94,217	70,814	46,851	28,281	80,446	15,771	10,423	4,779	351,582
Private persons . . .	82.1%	92.3%	94.9%	95.1%	93.8%	94.8%	95.0%	91.7%	100.0%
Rural Societies . . .	17.1%	7.7%	5.1%	4.9%	6.2%	5.2%	5.0%	8.3%	100.0%

The lands sold by the bank as individual properties were distributed among the categories of property in the following proportions:

TABLE XI. — *Absolute and Relative Distribution among the Categories of Property of the lands sold from 1907 to 1915.*

Categories	Definite Sales		Sales not yet definite		Sales with mortgage guarantee		Leases to be transformed into sales		Total	
	Area		Area		Area		Area		Area	
	deciatines	%	deciatines	%	deciatines	%	deciatines	%	deciatines	%
Choutour	903,581	23.2	4,307	54.1	27,738	21.6	45,316	57.1	980,942	23.8
Otrub	2,128,960	54.7	2,376	29.8	86,549	67.4	40,190	45.3	2,258,075	54.9
Societies and rural communes	670,058	17.2	726	9.1	8,176	6.4	3,173	3.6	682,133	16.6
Institutions	175,956	4.5	560	7.0	5,365	4.2	—	—	181,881	4.4
Enterprises of public utility	12,660	0.4	—	—	477	0.4	—	—	13,137	0.3
Total	3,891,215	100.—	7,969	100.—	128,305	100.—	88,679	100.—	4,116,168	100.—

The lands sold in 1915 were distributed as follows: there were 6,434 sales, of which 6,419 to individuals and 75 to rural societies affected, respectively, areas of 116,076 and 9,682 deciatines, as against 272,855 and 17,760 deciatines in 1914.

In nine years of liquidation the total number of loans granted and the area of the lands sold were as follows:

TABLE XII. — *General Results of the Liquidation of the Lands of the Bank, from 1907 to 1915.*

Year	Total Number of Loans granted by the Bank	Total Area of Lands sold — deciatines	Number of Individual Purchases	Area of Lands sold as Individual Property — deciatines	Percent. of Total Number of Loans granted to Individual Proprietors	Percent. of Total Area sold to Individual Proprietors
1907	1,069	180,148	447	4,599	41.8	2.5
1908	13,559	324,956	12,451	126,073	91.8	38.8
1909	39,438	551,307	38,528	432,487	97.7	78.5
1910	50,227	761,771	49,533	711,207	98.6	93.0
1911	40,549	679,658	40,177	633,754	99.1	93.3
1912	23,366	371,687	23,092	347,413	98.8	93.5
1913	22,082	410,118	21,808	387,905	98.7	94.6
1914	15,169	290,615	14,993	272,855	98.8	93.9
1915	6,494	125,758	6,419	116,076	98.8	92.3
Total	211,963	3,699,018	207,548	3,029,369	98.0	82.0

This table shows a progressive diminution in sales by the bank, the lands it held diminishing in extent since it made no new purchases. This was not the only cause of the diminished sales: the change in the government's agrarian policy should be added to it. For various and multiple reasons the great reform did not succeed in radically changing rural life. The mass of the rural population was necessarily outside the bank's sphere of action, and continued to have all that desire to possess land which characterized all Russian history in last century. A part of the population remained landless precisely as a consequence of the bank's activity. The government began to contemplate the reform which aimed at satisfying the land hunger, at least partially, and therefore distributed lands amongst the neediest peasants in a very different measure from that which the formation of a class of well-to-do peasants would have entailed. The fact that land was sold almost exclusively as private property had quite another effect. The radical transformation of rural economy, the passage of the collective property of the *mir* to individual property, necessarily entailed enormous costs; for really profitable results could be drawn from the *houtor* and the *otroub* only by a radical transformation of agriculture and the whole aspect of the countryside. This result could be attained only on a small part of the *houtors* which the bank formed for the peasants. In the mass of the rural population a reaction set in, a movement against the bank's activity. Hostility to the *houtors* and the *otroubs* arose. There was a reversion to the situation of the period in which, according to the bank's reports, "the activity, tending to a vast development of individual property" was regarded "rather coolly".

The following details as to the distribution of the lands sold to the peasants do not lack interest. The table shows that a great part of the lands were sold in somewhat large lots, of an area far above the average.

TABLE XIII. -- *Percentage of Lands sold as Individual Properties according to area.*

Year	up to 10 deciatines	from 10 to 20 deciatines	from 20 to 50 deciatines	from 50 to 100 deciatines	Total
1910 . . .	32.9	51.7	15.1	0.3	100
1911 . . .	28.1	49.9	21.4	0.6	100
1912 . . .	33.3	46.8	19.2	0.7	100
1913 . . .	19.7	48.4	27.7	4.2	100
1914 . . .	88.2	9.1	6.8	1.4	100
1915 . . .	22.7	46.2	29.9	1.2	100

It is most interesting to notice that the percentage of lands sold as *houtor* increases progressively as compared with those sold as *otroub* lands.

TABLE XIV. -- *Percentage of Sold Lands which were sold as Otroub and Houtor Lands, respectively.*

Year	Lands Sold	
	<i>houtor</i>	<i>otroub</i>
1910	23.6	57.6
1911	25.8	68.2
1912	31.2	66.0
1913	34.0	68.8
1914	37.0	74.2
1915	42.4	76.4

This table is one of the best illustrations of the bank's agrarian policy. In itself a *houtor* represents, as compared with an *otroub*, no agronomic progress. It unites in a single tenure various lots, only the peasant's house remaining in the village. The *houtor* is on the other hand a single farm including even the site of the peasants' house within its lands; but, as appears from the circulars and the practice of commissions charged to resettle the land, the *houtor* is often divided into various lots, sometimes widely separated from one another, and this makes it inferior to the *otroub*. It is however exactly this tendency to isolate the peasant at all costs, severing his ties with the village, which characterizes the bank's policy. Thus the circular of 19 February 1908 says that the *houtor* should have the first place in the land system, and places the *otroub* below the *houtor* divided into several lots.

From the point of view of the progress of agriculture the *houtor*, divided into several lots, is certainly less good than the *otroub*; but the *houtor*, equally certainly, serves better than the *otroub* to split up the masses of the peasant population.

In other words the policy of dividing and scattering the peasants was followed energetically and insistently, and it is in the predominance given to a purely and simply political principle that the causes of the discontent among the masses of the population must be sought. At bottom it was not brought about by the *houtors*, but by the lack or insufficiency of the enterprise which would have rendered *houtors* really profitable to the peasants.

In order to have an exact idea of the movement of the bank's lands we must notice that of 2,286,318 deciatines which it held on 1 January 1916, 802,261 deciatines cannot now be sold and 332,059 deciatines are not intended to be sold to the peasants.

The 802,201 deciatines belong to various categories: 299,058 are let on a lease of several years, and the remainder can either be sold with them or only after a series of works of irrigation and improvement have been executed. As regards the 332,059 deciatines not intended for sale to the peasants, they consist of 274,710 deciatines of woods to be preserved in the national interest; 19,769 deciatines destined for institutions; 3,844 for

churches, cemeteries, etc ; 29,829 for the needs of pisciculture ; and 3,908 deciatines which are not adapted to agriculture.

Thus there still remain unsold 1,151,898 deciatines or 17.9 per cent of the area belonging to the bank during the last nine years

These lands are classified as follows : 42.4 per cent. are to be sold as *houlors*; 44.7 per cent. as *otroubs*, 8 per cent. as the collective property of the holders of the *houlors* and *otroubs*, and 4.8 per cent. to the agricultural societies and communes.

It should be noted that the lands sold to an agrarian society or community are largely lands which, because of their too small area or for other reason, are not adapted to the formation of individual farms. These sales were also made in order to allow the peasants to redistribute their *nudiel* lands and thus prepare for the supersession of the *mir* by private property.

The third period is seen to be completely detached from those which preceded it, in which the bank met the "desire of the peasants to preserve collective property at all costs" and sold land principally to agrarian communities and societies, so that at the beginning of the new period, on 1 January 1908, of the whole area of mortgaged lands, comprising 7,062,020 deciatines, 72.6 per cent. belonged to agricultural societies and 25.3 per cent. to rural communes, while only 2 per cent. formed individual properties. In the third period however 98.8 per cent. of the lands sold by the bank passed to individuals.

The examination of this part of the bank's activity allows certain further conclusions. The Peasants' Bank was the government's instrument for the regulation and regularization of the passage of the lands of the nobility to the ownership of the peasants. It was thus that the crisis was rendered less acute. Above all the bank took charge of the interest of large property, not only giving this direct aid, but also rendering indirect service in seeking to reduce the compact strength of the *mir*, and in creating, while destroying the *mir*, a class of peasants who because they were well-to-do would be less susceptible to the revolutionary spirit.

(To be continued).

MISCELLANEOUS INFORMATION RELATING TO CREDIT IN VARIOUS COUNTRIES.

ARGENTINE REPUBLIC.

ARGENTINE LAND CREDIT IN 1915-1916. — *La Revue Économique et Financière*. Paris, 7 July 1916.

In spite of its abundant products, many of which find large markets and are paid for in gold in Europe, the Argentine Republic is going through a difficult period. The lack of ships and the unreasonable increase of freights are indeed very serious obstacles to exportation, and much of the wealth of the republic has had to be left unmoved and unsold for want of means of transport. It does not seem as though the current year would improve the situation: the harvest of 1916-1917 was below the average owing to drought and invasions of grasshoppers; and the Argentine government was obliged in 1917 to forbid cereals to be exported in order to keep the harvest for the needs of the country.

It is not therefore surprising that the Argentine Land Credit attained in 1916 to less satisfactory results than it would have done in normal circumstances. The crisis is however only transient, is common to all mortgage establishments in the country, and will end as the effects of the war gradually disappear.

The two last profit and loss accounts are compared in the following table:

	1915 frs.	1916 frs.
ASSETS.		
Interest on loans	17,236,613	15,941,564
Delayed interest, indemnities, reimbursements.	154,777	185,593
Interest and various income	62,838	573,946
Profits of property	—	30,783
	<hr/> 17,454,228 <hr/>	<hr/> 16,731,886 <hr/>

	1915 frs.	1916 frs.
LIABILITIES.		
Annuities of bonds	8,531,738	8,490,468
Fiscal dues	219,801	217,582
Interest and commissions	4,069	4,076
Commissions and expenses	6,386	33,820
General expenses	515,303	611,969
	<hr/>	<hr/>
Assets	9,277,197 17,454,228	9,357,915 16,731,886
	<hr/>	<hr/>
Net profit	8,177,031	7,373,071
Deduct :		
Remunerations as by by-laws	—	200,000
Special provision	4,188,130	2,683,474
	<hr/>	<hr/>
Remainder available	3,988,901	4,409,497
Previous balance.	1,072,885	71,116
	<hr/>	<hr/>
Total available	5,061,786	4,561,613
	<hr/>	<hr/>
To be employed on :		
Reserve as by by-laws	199,445	224,525
Shares	2,500,000	2,801,518
Quotas	383,333	358,973
Council	228,946	176,597
Meeting at Buenos Ayres	228,946	—
	<hr/>	<hr/>
Extraordinary reserve	3,490,670	3,561,613
Balance.	1,500,000	1,000,000
	<hr/>	<hr/>
	71,116	—
	<hr/>	<hr/>
	5,061,786	4,561,613
	<hr/>	<hr/>

Thus the dividend was fixed at 28 francs a share instead of 25 francs as in 1915 and the dividend on quotas at 7.16 francs instead of 6.66 francs. It will be seen that, as in the previous year, a sum equal to annuities in arrears before the current year was deducted from profits and carried over to the special reserve.

The following is a comparison of the two balance-sheets :

	31 December 1915	31 December 1916
	frs.	frs.
ASSETS.		
Shareholders.	25,000,000	25,000,000
Premiums to be redeemed on bonds . . .	29,478,638	29,223,239
Mortgage loans	214,873,903	195,573,088
Mortgage debtors for interest falling due	8,342,979	11,031,966
Properties.	995,038	2,969,303
Paper.	3,507,000	3,507,000
Bonds of the Defence	3,500,000	18,500,000
Various debtors.	4,060,671	8,282,048
Fiscal dues to be recovered	110,000	80,667
Order accounts	6,238,748	6,370,032
Instalments of dividends	—	1,000,000
	<u>296,106,977</u>	<u>301,537,343</u>
LIABILITIES.		
Capital.	50,000,000	50,000,000
Bonds	191,943,000	190,280,000
Reserve as by by-laws.	1,775,628	1,975,073
Extraordinary reserve.	20,150,000	21,650,000
Reserve for reconstitution of premium to be redeemed.	2,817,217	3,374,569
Special provision	—	7,699,583
Various creditors	9,562,258	8,523,666
Order accounts	6,238,748	6,370,032
Interest on loans received in advance . .	71,221	85,834
Mortgage interest carried over	4,298,999	3,826,183
Profits and losses	9,249,916	7,445,088
	<u>296,106,977</u>	<u>301,537,343</u>

The inconveniences from which the Argentine suffers have naturally reacted unfavourably on the business of the Argentine Land Credit. On the other hand its business has been affected by general circumstances in an unexpected way, for although exportation has been limited the prices obtained for exported products have maintained the balance of trade in favour of the Argentine. Therefore and because of government measures for preventing gold from leaving the country, the conditions of the money market at Buenos Ayres were suddenly reversed, and certain mortgage

debtors took considerable advantage of the state of the European exchange, which had become very favourable to Argentine money, to repay the sums they had borrowed. We should notice that if the exchange favoured these debtors the Argentine Land Credit suffered none the less neither loss nor prejudice, for its loans are made in francs, that is in the same money as its capital in shares and the capital it has borrowed to develop its business, and in the money with which it must cover the costs of such borrowing.

This position, which facilitated the redemption of loans, made the re-employment of capital in loans in francs difficult. The company ran the risk of seeing its available funds left unproductive and the council decided therefore to make loans in Argentine gold money. By the end of the year a certain number of loans of this kind had been made, but the difficulties prevalent in the country restrain mortgage as they do other business, and the applications for loans were not numerous.

On 31 December 1915 the amount of loans was 223,145,077 francs. Repayments effected in 1916 amounted to 31,830,810 francs, reducing the amount to 191,314,267 francs. New mortgage investments otherwise amounted to 11,857,696 francs of which 7,598,875 francs were reassigned. Finally the effective amount of the mortgage investments of the Argentine Land Credit was 195,573,088 francs.

Current loans include urban loans amounting to 65,728,655 francs and rural loans amounting to 129,844,434 francs.

Among assets the Bonds of the Defence were increased by fifteen millions, accruing from the temporary re-employment of repayments of loans. Similarly the item "various debtors" shows an increase of 4,221,377 francs comprising bank accounts exclusively.

Among liabilities appears a special provision of 7,699,783 francs, amounting last year to 3,511,453 francs and then comprised in the item "various creditors". This provision was increased by 4,188,130 francs in conformity with a resolution passed at the last general meeting. This amount represents the sum of the interest acquired but not received in the years 1914 and 1915.

The "various creditors" item stands at 8,523,666 francs, having diminished by only 1,038,571 francs in spite of the subtraction of 3,511,453 francs for the special provision. The increase of accounts comprised by this item is due to a large proportion of new assignments to the various provisions which it includes.

AUSTRALIA

THE SOUTH AUSTRALIAN LAND MORTGAGE AND AGENCY COMPANY IN 1910.

— *The Statist*, Vol. LXXXIX. No. 2,046. London, 12 May 1917.

The thirty-eighth ordinary general meeting of this company was held in London on 9 May 1917. The balance-sheet for 1916 showed that the debenture stock had been reduced by £39,290 and therefore stood at £74,510. Loans on mortgages amounted to £11,282; and the value of

properties in hand was £154,964, showing a decrease of £24,048 of which rather more than half was due to losses of live stock consequent on drought and floods. Investments amounted to £93,569; and cash in hand and at the bankers to £3,942.

Among items on the assets side of the account was £7,077 as the value of unsold wool. The company's clip of wool in 1916 comprised 987 bales. The total stock on stations on 31 December 1916 was 54,503 sheep and 18,194 cattle, as against 66,242 sheep and 22,741 cattle on 31 December 1915.

On 1 April 1917 £24,410 more of debenture stock was paid off, and debenture stock was thus left at £50,100.

The profit and loss account showed a credit balance of £8,549.

British and colonial income taxes, and land and absentee taxes paid by the company in 1916 amounted to £5,916.

ITALY.

1. THE "CREDITO AGRARIO PER IL LAZIO" IN 1916. — *Report on the year 1916.* Rome, 1917.

This institution for affording agricultural credit was founded at Rome by the law of 21 December 1902, No. 542. It had an initial capital of a million liras, of which 500,000 liras were obtained from the *Banca d'Italia*, 200,000 liras from the Savings Bank of Rome, and 300,000 liras from the Savings Bank of the Lombard Provinces. In order that it might increase its resources the "Credito Agrario per il Lazio" was also enabled to receive savings deposits and issue bonds on fixed terms.

It is active only in the Roman province. Its business consists of:
a) operations by the medium of other bodies (agricultural consortia, rural funds, agricultural universities, societies for distilleries and cellars, etc.);
b) operations with agriculturists directly.

Operations with these various bodies or institutions comprise: 1) the rediscounting of bills drawn on them by agriculturists, the institutions concerned being legally constituted, situated in the Roman province, and preferably co-operative in form; 2) the acceptance for discount of the bills of intermediary institutions, drawn for the purpose of continuing their business and buying on commission articles useful to agriculture, or for that of making advances in the case of collective sales of agricultural products, etc.

Operations with agriculturists directly comprise: 1) the acceptance for discount of bills drawn by agriculturists living in places in which there are no intermediary institutions or none able to undertake business of this kind; 2) the acceptance for discount of securities created by agriculturists, guaranteed by a privilege over seeds or pledged agricultural products.

Every loan, and every house or agricultural holding, is limited to the maximum sum of 5,000 liras. Where an operation is secured by a privilege this maximum is 10,000 liras,

The amount of operations secured by pledged agricultural products is fixed on the following scale : on cereals and wools 75 per cent. of the value of the pledge ; on oil 60 per cent. ; on straw, hay, wine, vinegar, spirits, etc. 40 per cent.

The term of operations is limited to a year, but loans to enable the purchase of live stock and machinery may be for three years.

When the chief results of the institute's activity in 1916 are shown it appears that its operations in that year aggregated 8,614,570.25 liras. Most of them, amounting to 7,660,134.75 liras, were with intermediary institutions. These were distributed as follows :

Agricultural consortia and comitiae	3,583,817.84	liras
Various societies affording agricultural credit . . .	1,900,396.90	"
Popular co-operative banks	671,037.30	"
Societies for distilleries and cellars	334,500.00	"
Savings banks	311,520.75	"
Rural funds	300,748.40	"
Societies for trading in, selling and exporting agricultural products	107,000.00	"
Agricultural loan funds	51,113.56	"
Total . . .	<u>7,660,134.75</u>	liras

The destination of these loans was as follows :

Cereal crops	2,397,139.40	liras
Vine growing	1,621,666.02	"
Sulphate of copper, sulphur, various fertilizers . . .	1,234,809.73	"
Various crops	1,185,841.38	"
Stock farming	538,112.95	"
Olive growing	395,374.20	"
Agricultural machinery and implements	287,191.07	"
Total . . .	<u>7,660,134.75</u>	liras

The detailed description of these loans was as follows :

1506 bills of 1 to 50 liras	530,125.48	liras
5004 " 51 " 100 "	517,227.32	"
4659 " 101 " 500 "	1,228,663.00	"
1669 " 501 " 1000 "	1,367,468.99	"
1060 " 1001 " 5000 "	2,009,709.27	"
61 " more than 5000 "	2,006,940.69	"
15,459 bills for . . .	<u>7,660,134.75</u>	liras

The operations with agriculturists directly amounted to 954,435.50 liras, distributed according to their nature as follows: simple, direct discount 356,224 liras; rediscount of bills 180,461.50 liras; advances on pledged agricultural products 135,500 liras; advances on a privilege over seeds 282,250 liras. The destination of these loans was as follows:

Growing vines	141,634.45	liras
" cereals	550,647.14	"
" olives	48,527.07	"
Various crops	93,628.40	"
Sulphate of copper, sulphur, various fertilizers . .	20,154.90	"
Stock farming	9,843.54	"
	<u>954,435.50</u>	<u>liras</u>

On the operations with intermediary institutions the rate of interest oscillated from 5 $\frac{1}{2}$ to 6 $\frac{1}{2}$ per cent., on those with agriculturists directly from 6 $\frac{1}{2}$ to 7 $\frac{1}{2}$ per cent.

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2. LOANS TO AGRICULTURISTS FOR GROWING CORN AND OTHER CEREALS.
— *Gazzetta Ufficiale del Regno d'Italia*, No. 154, Rome, 30 June 1917.

A decree of the Lieutenant General of the Kingdom, dated 28 June 1917, No. 1035, contained the following provisions:

In order to facilitate loans intended to encourage the growing of corn, other cereals and edible tubercles, institutions of agricultural credit, authorized by special laws, may receive advances up to 20,000,000 liras, at 3 per cent.

They will give the sums received as advances to agriculturists directly whenever, for one reason or another, recourse to an intermediary establishment is impossible.

When the sums to be granted are asked for in order to provide seeds the institution of agricultural credit will give the landowner, in exchange for a bill signed by him, a bond authorizing him to withdraw merchandize in the quantity desired, at the cost price of the provincial consortium's granary.

The State will supply seeds for distribution to the granaries of the provincial consortia.

The rate of interest on the loans to be made with the sums received as advances must be so determined that it does not surpass 4 per cent. if loans are made to agriculturists directly by the institutions of agricultural credit, or 5 per cent. if they are made by means of intermediary institutions.

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3. THE "FEDERAZIONE PER IL CREDITO AGRARIO NELL'UMBRIA" IN 1915.
Report of the federal council for 1915. Perugia, 1916.

The law of 2 January 1910, No. 7, on agricultural credit in Marche and Umbria (1) instituted in each of these districts a federation of those of their agricultural funds, rediscounting institutions, savings banks and co-operative banks which had associated themselves spontaneously. This federation has to administer the fund destined by this law to afford agricultural credit, namely 700,000 liras in Marche and 400,000 liras in Umbria. It has in particular the duty of endowing agricultural funds and employing temporarily capital of which the destination has not yet been fixed. The report of the council of the federation shows that on 31 December 1915 thirteen agricultural funds were active in Umbria. They had in that year effected loan and discount operations for a sum of 403,602.75 liras and their balance on 31 December was 169,745.98 liras; namely 303,225.40 liras for the purchase of fertilizers; 72,324.70 for stock, implements and machinery; 11,050 liras for cultivation; 7,162.15 liras for anti-cryptogamous substances; 6,505.50 liras for seeds; and 3,335 liras for the harvest.

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4. THE DEVELOPMENT OF THE "BANCA DELL' ASSOCIAZIONE AGRARIA PAR-
MENSE". *Bollettino dell' Associazione Agraria Parmense*, No. 14, Parma, 7 april 1917.

Some employers' agricultural associations in Italy have constituted agricultural banks. One of the most important of these is named in our title, the Bank of the Agrarian Association of Parma. It grants loans in the form of bills to its members and receives savings deposits even from outsiders. This bank limits its business to agricultural credit, thus encouraging the return to the soil of a large part of savings. It was legally constituted on 7 November 1908 in the form of a limited liability co-operative society having an unlimited capital in shares of the nominal value of 50 liras each. Its development appears from the following figures which refer to liras:

(1) For the organization of agriculture in Marche and Umbria see our issue for June 1915, pp. 61 et seq.

	1914	1915	1916
General turnover	56,088,791.13	113,248,525.77	254,464,304.73
Turnover of the till . .	26,464,111.32	83,518,477.50	177,854,106.08

DEPOSITS:

Received.	5,073,655.84	17,286,973.53	48,280,827.55
Paid out	5,039,643.58	13,300,406.74	41,703,955.50
Turnover.	10,113,309.42	30,787,380.27	89,984,783.05
Balance 31 December .	3,038,415.50	6,825,022.29	13,401,894.34

CAPITAL IN SHARES AND

RESERVE	318,866.95	343,901.16	386,036.76
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PAPER:

Bills received	9,390,757.12	16,368,624.28	28,686,920.79
" issued.	9,296,671.67	13,438,500.87	23,959,959.28
Turnover.	18,687,428.79	29,807,125.15	52,646,880.07
Balance 31 December .	2,073,946.68	5,004,070.09	9,731,031.60

STATE SECURITIES . .	409,500.00	1,021,290.00	2,982,553.93
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This bank pays interest on ordinary free savings deposits at the rate of 3 $\frac{1}{2}$ per cent. ; and on engaged savings deposits at the rates of 3 $\frac{3}{4}$, 4, 4 $\frac{1}{4}$ and 4 $\frac{1}{2}$ per cent., according to the importance of the sum and the term for which it is engaged. It also receives small savings deposits at 3 $\frac{3}{4}$ per cent. and deposits on current account at 3 per cent. It lends, discounts, opens current credit accounts, makes advances on pledged provisions and issues interest-bearing bonds.

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5. THE "BANCA DI CREDITO AGRICOLO" OF FLORENCE IN 1916. *L'Agricoltura Toscana*, No. 6, Florence, 31 March 1917.

This Bank of Agricultural Credit was founded at Florence in 1913 with the object of advancing capital to its members in order that they might stock their holdings and buy agricultural machinery and implements, seeds, fertilizers and all farming requisites. The bank on 31 December 1916 had 403 members having 858 paid-up shares, that is 85,000 liras of paid-up capital. In 1916 it placed at the disposal of its agriculturist members 1,401,060.39

liras, of which 773,360.50 liras represented renewals and 627,699.89 liras fresh operations. Deposits on current account amounted on 31 December 1916 to 93,725.92 liras, as against 49,481.95 liras on 31 December 1915. In order more and more to encourage small savings, special savings-bank books were made, giving interest at the rate of 4 per cent. for deposits withdrawable at sight and 4 $\frac{1}{4}$ per cent. for those for fixed terms. Net profits amounted to 2,096.50 liras, distributed as follows : 20 per cent. to the ordinary reserve fund — 419.20 liras ; 10 per cent. to the employees — 209.65 liras ; 10 per cent. to agricultural propaganda — 209.65 liras ; 30 per cent. to the extraordinary reserve fund — 628.96 liras ; 30 per cent. carried over — 628.96 liras. Thus the reserves amounted on 1 January 1917 to 4,121.19 liras or 4.80 per cent. of the subscribed capital in shares.

Part IV: Agricultural Economy in General

GERMANY.

RECONSTRUCTION AFTER THE DESTRUCTION FOLLOWING ON EVENTS OF THE WAR IN EAST PRUSSIA.

OFFICIAL, SOURCE :

VERORDNUNG BETREFEND DIE UMLEGUNG VON GRUNDSTÜCKEN IN DER PROVINZ OSTPREUSSEN
(*Ordinance as to the Redistribution of Pieces of Land in the Province of East Prussia*).—Preussische Gesetzsammlung, No. 51, 1915

The legislative measures adopted for reconstruction, in the districts of East Prussia destroyed or damaged during the military operations which took place in the beginning of the war, are the results of legislative work extending over all 1915. They cover of course very important questions as to redistribution and the creation of mortgages, and are in these respects the evidence of a methodically elaborated system. To study it cannot be other than interesting from a general point of view; and will give a hint of possible enterprise which would complete the means of interior colonization already habitual.

The measures are justified by the events which caused them and by the tenour of the Prussian constitution of 1850. Article 63 of this allows the king to legislate in case of urgency. Accordingly on 15 January 1915 a first royal ordinance authorized the Higher President of the province, with the consent of the provincial council, to apply, in those urban districts and rural communes having more than 2000 inhabitants which had been ravaged by the war, the provisions of the law of 28 July 1902 — 8 July 1907 as to the modification of the position of real estate in Frankfort-on-Maine. Subsequently on 11 December 1915 a second royal ordinance introduced into the first certain modifications which did not however prevent the essential prescriptions of the cited law from being maintained. The unified text,

co-ordinating these provisions, was promulgated on 21 December 1915 and afterwards ratified by the two chambers of the Landtag (1).

Further an ordinance of 1 May 1916, completed by a ruling of the public administration dated on the 9th of the same month, provides that loans granted by the State for the construction or reconstruction of destroyed or damaged buildings shall be secured by a mortgage on the real estate.

Such are the legislative elements going to make up these measures of which we will now set forth the chief features.

§ 1. CONDITIONS OF REDISTRIBUTION AND PRELIMINARY PROCEDURE.

The power to undertake redistribution on certain parts of the communal territory has been given to the Higher President. In communes having more than 2000 inhabitants he must do it with the consent of the municipal council, in those which are less important with that of the commission of the circle. This redistribution will affect landed property belonging to different owners and will aim at constituting suitable lots of building land and opening up new areas for building. Consideration of the public advantage must of course always be the basis of the undertaking.

An area for redistribution must first be determined, and it must extend over only part of the communal territory ; for if redistribution is to be beneficial it must be applied only to the area judged necessary for the end in view. In determining the area regard must be paid in particular to the configuration of the soil and the roads which are in existence or are anticipated by the plan for reconstruction. Certain real estate included in the area may be excepted from redistribution, entirely or partially, either because there are buildings on it, or because it is appropriated to especial uses, as horticultural establishments, nurseries, parks, etc.

A further annexation of real estate situated outside the redistributed area is anticipated. If the interested landowners do not consent to this complementary annexation the measures used in the case of the determination of the original area will be applied.

Redistribution will take place when the deliberations of the commune are followed by a request of the municipality ; and also on the demand of the majority of the proprietors owning more than half of the surveyed area, whether built or unbuilt, of the real estate to be redistributed. In making calculations, where properties owned in fractions by various persons are concerned, the proportionate right of each owner will be taken into account.

No prohibitions to alienate may be made in opposition to the redistribution. The redistribution may not be carried out if the larger part of the area it would affect is employed by owners who themselves draw profit from it by gardening.

(1) Collection of laws of 17 July 1916, p. III.

When the municipality has decided to bring about a redistribution, in the conditions which have been indicated and following the preliminary procedure which has been explained, intimation must be made to the authority responsible for the control of construction. A statement as to the real estate must also be drawn up, giving the name of its owners, its designation according to the cadaster and the land books, the proportion of which owners must be dispossessed, the proportion to be used, according to the plan for reconstruction, for public roads and squares, and the interval of time which will elapse before these latter are given up to traffic and construction. A plan will be annexed to show the situation and extent of the real estate to be redistributed, the buildings which may be placed on it and the particular use to be made of it. The statement and the plan will be available for inspection by those interested and complaints which may be made within a period of not less than a week will be heard. A special notice will however be issued to the competent authority when real estate permanently appropriated to the exercise of rights belonging to the State is in question.

The municipality must endeavour to satisfy complaints as far as possible and then transmit without delay to the commission of the circle the request for redistribution and all pertinent documents. The commission decides, after hearing the local controlling authorities, as to whether the conditions for redistribution, as these have been set out, exist, and as to complaints which have not been satisfied.

With the consent of applicants the commission can decide on the costs or partial costs for which they become responsible: Its decision must be signified to the municipality, the landowners and the interested persons who have had part in the proceedings, and the municipality is responsible for publishing it.

The interval which allows of appeal to the provincial council against the decision of the commission of the circle is of only one month (1).

The demand for redistribution can be revoked only before the decision of the commission of the circle is made. Such revocation can be made by means of a declaration of the owners of more than two thirds of the area covered by the demand. Costs are borne by those who thus revoke a demand they have made, their contribution being exacted from them by the municipality and received by the communes according to the procedure for forced recovery.

When the commune and the landowners have entered into a binding agreement as to the redistribution, the procedure for redistribution will be omitted if the municipality and the majority of the landowners, in the proportion already mentioned, ask for such omission.

If such agreement affect only part of the area to be redistributed, so that the object of redistribution can still be attained where the agreement has force, and if the owners suffer such limitation, or a further redistribution of

(1) By the terms of Article 121 of the law on the administration of the kingdom, dated 30 July 1883, this interval would have been of fifteen days.

their real estate is not excluded, the procedure for redistribution will be followed.

To allow these arrangements to be made the district commission can fix a period during which the procedure for redistribution will be suspended. Such delay will be imposed at the request of the municipality, or the majority of the landowners to whom the commission would allow the right to deposit in common with the municipality the demand for redistribution.

Decisions are made by the district commission in the form of resolutions, which are final if the delay already mentioned has been imposed.

§ 2. PROCEDURE FOR REDISTRIBUTION.

1. *Area Declared Open. Commission for Redistribution.* — As soon as the Higher President esteems that one or more redistributions may be made he declares in the case of each individual area that proceedings are open and names an executive commission. One commission may even have charge of several redistributions.

There will belong to this commission as members : *a*) two commissioners of the Higher President of whom one at least is a juriconsult able to fulfil the functions of a judge ; *b*) an expert architect ; *c*) a certificated geometrist ; *d*) a higher administrative official ; *e*) an expert for the valuation of the real estate. The Higher President will nominate all the members of this commission and a deputy for each of them, and will choose a president and vice-president from their number. Members of the municipality cannot belong to this commission. The Higher President of the province and the presidents of districts have the right to be present at the meetings personally or to be represented at them.

The members of the commission have the right to the reimbursement of their expenses and to emoluments calculated according to the prescriptions having force in the case of experts before the tribunals, unless they are already paid as State officials.

Resolutions of the commission are valid if passed at a meeting to which all the members, the president and the vice-president have been summoned and which half the members attend. They are passed by a majority of votes, the president having a casting vote.

The commission is represented judicially and extra-judicially by its president. The opening of proceedings for redistribution and nomination of the commission are communicated to the public in accordance with local custom.

2. *Registration of Redistribution.* — On the demand of the commission the office of the land book must register in the land book the opening of proceedings for redistribution.

The commission must be aware of the contents of the land books. If necessary it can claim copies of them. Entries made after the first re-

gistration of the opening of proceedings will be communicated by the office to the commission.

3. *Principles of Redistribution.* -- Real estate intended for redistribution and existing public roads and squares will be massed. When allotment is made the land necessary for the public roads and squares will first be set aside and transmitted to the commune or any other body responsible for maintaining the roads.

The remaining land will be divided among the landowners with a view to equity and the best means of attaining the object of the redistribution. As much as possible, the part which each landowner previously held of the total area will be taken into account. The lots should stand at right angles with the streets and be remitted to the landowners in their former condition. The sites of buildings, for which a special indemnity would be payable, should be left to the existing owners.

Coproprietorship or a former common employment of property will be ended by assigning to each interested owner an isolated lot corresponding to his previous partner's right.

The question of indemnities is met and treated in equal detail. An indemnity will be granted for land employed with a view to the establishment of public roads and squares in excess of the area of those included in the massed real estate, if this land surpasses that contributed by the proprietors by 35 per cent. when redistribution is undertaken at the request of the municipality, or by 40 per cent. when it is undertaken at the request of the proprietors.

In addition to their right to allotments proprietors have the right to pecuniary indemnification, *a*) for buildings or other accessory or essential parts of the redistributed real estate taken from them ; *b*) for the depreciation of redistributed real estate unless the lot assigned to the owner is equivalent compensation ; *c*) for the loss of an industry based on the use of the real estate. It should be noticed on the other hand that any appreciation of the real estate consequent on the redistribution is left out of account. If however the real estate to be redistributed is burdened with dues, the commission may oblige the owner to pay a sum equal at least to the value by which the real estate was depreciated for him by such dues.

If the parcels to be assigned are too small they will be fused. If they ought to be assigned to several owners they will be assigned to them *en bloc* in coproprietorship, mention being made of the individual interest of each and the various charges which each incurs ; for it seems that it will be possible to extinguish coproprietorship only when the isolated parcels are sufficiently extensive to allow of building. If no agreement is reached the whole indemnity should be allotted only in money but the sum with which the proprietor has been charged as a contribution to redistribution will be subtracted from its amount.

It is the commission which decides on the possibility of building after having heard the advice of the authority responsible for the control of buildings.

Interested persons whose rights in the real estate are suppressed or

modified, whether they be proprietors, leaseholders or farmers, should be specially indemnified, the commune being considered in this case as the expropriator.

When the plan for construction on the area to be redistributed has been definitely fixed it cannot be modified during the process of redistribution without the consent of the commission. The municipality may however be asked to allow modification in order to facilitate redistribution. In any case the plan for reconstruction should be fixed before the plan for allotment is determined.

A fixed interval will be allowed for bringing the public roads and squares into good state, and authority to build may not afterwards be refused.

In order to reach the object of redistribution the commission may preserve existing services due from the land or create others. It may carry over to an assigned parcel other rights of real estate, reserving a just indemnity, so long as the exercise of such rights does not notably prejudice the holder and they are not in opposition to the objects of redistribution. The commission must also distribute, as far as is necessary, public charges burdening real estate as a consequence of property in the soil.

The plan for allotment must as far as possible be established with the consent of those interested and in a manner which renders the payment of indemnities in cash superfluous.

The arrangements made will be respected by the commission, which will not be able to revoke them if the other owners of real estate accommodate themselves to any restrictions which may arise out of them, and if they are not prejudicial to the execution of the redistribution as conditioned by the provisions of the present law. The same holds good when these arrangements between the commune and the proprietors are not binding in form.

When in the matter of a discharge or assignment of indemnity the interests of the commune are opposed to those of the proprietors, the president of the district should give the proprietors a curator and representative. These may then form a community of interests and plead in a court of justice. The curator has the status of a legal representative and can be chosen from among the proprietors; and when he has been nominated the commune must at his request advance to him his costs including those necessitated by judicial proceedings. A suitable indemnity, fixed by the commission, is also allotted to him at his request.

The expenses incurred by the commune, as compensation for property devolving on it, are excluded from distribution among the proprietors, except the indemnities in cash due to the proprietor for losses and depreciation and the expenses and indemnities of curators.

This distribution is made with due regard to the profit derived by each proprietor from the redistribution, and to the length of façades and the area, site and value of the parcels assigned. At the request of the proprietor the payment of the contribution for redistribution may be deferred, interest at the rate of $3\frac{1}{2}$ per cent. being charged until the time of sale or construction.

When the whole amount of payments, including payments for joint ownership, compensation and other dues to the commune, and indemnities and compensation due from the commune, surpasses the total sum of the expenses to be shared, the commune is obliged to pay this sum to the proprietors.

Interested persons should prove their rights as soon as these can be defined, and should do so as far as possible before the commission for redistribution or the district commission. Failing this, these commissions may charge them with the costs consequent on their tardy action.

4. *Drawing up and Fixing the Plans for Redistribution.* — The commission must draw up a plan for redistribution with a map, showing the former and the new sites of the properties, and giving the details of redistribution, and all other indications as to indemnities, payments for joint ownership, compensations and contributions for redistribution. The commission will discuss this plan and the map with those interested in it who must appear at the meeting and defend their interests. Among them the local police, who must be enabled to give weight to their interests, must not be forgotten. In so far as the interests of the police are involved the plan for allotment should be made as much as possible in agreement with the police.

The commission will legislate as to the establishment of the plan for allotment and the map, and especially as to the modifications and additions which those interested may claim. In case of need it will rectify and complete the plan and map as it may resolve. The plan will mention the results of arrangements with interested persons as often as these are not opposed to the end followed. For such resolutions there must be present, in addition to the president, at least an expert architect, a certified geometrist, an administrative official and an expert for the valuation of the real estate. If the president is not a jurisconsult, able to exercise the functions of a judge, a second representative, nominated by the Higher President and capable of exercising such functions, must be present.

When once the resolution has been passed the plan and map will be communicated to each interested person, the parcels assigned to him being pointed out; and the plan and map will be available for public inspection. There will be an interval of two weeks during which complaints may be made to the president of the commission.

If it be necessary to suppress or redistribute public roads the authority of the police of the roads must be advised. Opposition to such suppression and redistribution should be made during the course of the proceedings.

If complaints are made against the plan the commission should endeavour to meet them by negotiation. If this cannot be done the action taken and the discussion should be submitted to the district commission which decides in the last resort.

5. *Appeals.* — To safeguard rights to indemnities in cash those interested may appeal against the plan for allotment from the moment of its determination. Appeals will be received during an interval of two months counting the day of allotment. In the case of those interested persons who ought to be informed of the declaration of assignment, this interval lasts

for two months after they are thus informed. If a representative and curator has been nominated he should make the appeal against the commune and the commune against him.

6. *Execution of the Plan for Allotment.* — An appeal does not suspend the execution of the plan for allotment, which ensues when the district commission has resolved on a declaration of assignment. This resolution indicates the day on which rights will be transferred in as far as the redistributed real estate is concerned. At least a week will elapse between the resolution and the transference. The declaration of assignments must be communicated to all interested in it and published without delay, in conformity with local custom, by the municipality. From the time of such publication the contents of the plan of allotment will have effect. Previous property rights in the redistributed real estate are extinguished. At the same time the real estate is emancipated from all charges and restrictions on private right. It loses in particular the status of trust or family estate, and ceases to be held in fee or burdened because of a loan. The transference of rights is therefore complete ; but exception must be made of the hereditary right of exploitation, as in the case of a mine, of services, the rights of redemption and pre-emption, and of charges on the real estate which do not consist merely of dues in money or kind or personal service — all this saving in the case of other provision in the plan for allotment.

The office of the land book must register, at the commission's request, changes which occur, transferences of rights and charges, and any creation of new charges.

In so far as the deposit and employment of cash indemnities are concerned, where real estate is held in trust, as a family property or in fee, or is burdened because of a loan or by real estate charges, mortgages, debts on the land or rents, the provisions of articles 37 and 38 and 47 to 49 of the law on the expropriation of real estate, dated 11 June 1874, and the provisions of articles 35 to 41 of the law as to the imperial law on forced awards and administration, dated 23 September 1899, will be applied by analogy, except that instead of the proprietor of the real estate the commission for redistribution may equally, in the case of article 49 of the first of the laws mentioned, call upon the competent authority to bring about the liquidation.

7. *Complementary Plan for Allotment.* — This plan is applicable to further distributions of assets and liabilities to which the procedure followed may give rise. The principle of a further distribution among the new proprietors is also applicable to contributions which cannot be recovered. Recoveries will be made in the same conditions as the administrative procedure for coercion at the request of the commune. When the obligations resulting on payments for joint ownership, benefactors or contributions have been met, the office of the land book will cancel the correspondent entries.

§ 3. FINAL PROVISIONS.

Certain other cases are anticipated, and there are certain definitions of methods of applying the law and of cases in which the preceding provisions cannot be applied. It will be useful to define the category of interested persons.

This includes the communes, the proprietors, the mortgagees of land, those having a right to rents, and persons having a hereditary right of usufruct or exploitation, especially where mines are concerned. It includes also persons who have a right affirmed or guaranteed by registration in the land book, and those who have any right in the real estate to be redistributed or any right burdening it, the leaseholders or farmers who occupy it in consequence of a farming or other lease, and, in the case of a forced award or administration, the pursuing creditor. Interested persons whose right has not been registered in the land book must establish the credibility of such right at the request of a proprietor, the commission or the authority before whom the proceedings for redistribution are pending. They are otherwise excluded from participation in the proceedings.

The commission for redistribution has the right to require the office of the land book to rectify the land book by registering a property, and to oblige its proprietor, on pain of a fine, to produce the documents it deems necessary to prove the right of proprietorship.

Persons who take part in the war (article 2 of the law of 4 August 1914) or who leave the country because of the war and do not return to it, may, if they have no representative, have one assigned to them for the safeguarding of their rights by the Higher President of the province.

They must if possible be informed of the nomination of their representative, which they may revoke, nominating another. Special costs incident to the nomination of a representative are included among costs of procedure.

If there be a judiciary dispute as to the right by which participation in procedure is claimed, both parties to the dispute are deemed to be "interested".

The case is anticipated of a necessity to suspend proceedings for redistribution when circumstances, notably those connected with claims for indemnities, cause fears that these proceedings will be financially unprofitable or involve the commune in disproportionate expense, or when these proceedings appear superfluous.

§ 4. THE SECURITY FOR STATE LOANS FOR THE RECONSTRUCTION OF BUILDINGS DESTROYED DURING THE COURSE OF MILITARY OPERATIONS.

This matter is regulated by the ordinance of 1 May 1916 which we have already noticed. For its purpose the State grants redeemable loans, bearing no interest, secured by the entry in the land book of a guaranteeing

mortgage equal in amount to that of the loan, and of a preference over all other and private charges which may burden the real estate. These rules do not however apply to buildings which in virtue of a right have been erected on another's soil (article 95, paragraph 1, 2nd phrase, of the German civil code).

When the loan has been granted, the authority competent to allot the war or the provisional indemnity should certify whether and in what measure the granted loan has been usefully employed, within the limits of the approved plan for reconstruction.

If the loan is certified to have been usefully employed the guaranteeing mortgage enjoys, while and in the measure in which it does not become united with the mortgaged property in the tenure of one person, a preference over other charges arising out of private rights and burdening the same property.

As the debt is extinguished the guaranteeing mortgage loses its preference over anterior charges.

It should be noticed that these rules are, by analogy, applicable to buildings erected in virtue of a building right.

Certain complementary conditions are contained in the interministerial decree of 9 May 1916. Redemption will begin after an interval of five years, calculated from a date to be subsequently fixed by the Minister of Finances. The annual payment for redemption is fixed at 3 per cent. of the amount of the loan and is payable half-yearly on 1 October and 1 April. The loan may be called for at once if transference takes place except by succession or by a legal act practically equivalent to succession, such as a reserving contract. Exceptionally a transferee may still benefit by the loan if the alienation has been justified by economic reasons. If the property remains in the possession of the person who has suffered loss, or of his legal heirs who are so in right of succession or a legal act practically equivalent thereto, a quarter of the original sum of the loan is remitted at the end of five and another at the end of ten years, beginning at a date to be generally fixed by the Minister of Finance.

ITALIAN COLONIES.

LIBYA.

(TRIPOLI AND CIRENAICA).

LAND SYSTEM AND COLONIZATION.

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§ I. GENERAL REMARKS. ADMINISTRATIVE ORGANIZATION.

A. *General Remarks.* -- Libya which is composed of Tripoli and Cyrenaica embraces the territory between the eastern frontier of Tunisia and the western limits of Egypt, between Ras Agir and the Gulf of Sollum, and reaches in the interior as far as Tassili on the high plateau of the Azgier and as far as the Tummo Mountains which mark the geographical boundary between the desert of the Fezzan and the Sahara properly so called; that is it covers about 10 degrees from north to south (from 33° to about 23° northern latitude) and 14 degrees from west to east (from 11° 30' to 25° 20' longitude). The southern and eastern frontiers and a large part of that which adjoins the French hinterland are however indeterminate. The estimates of area therefore vary from 800,000 to 1,500,000 square kilometres (1), the latter figure being reached by including the quadrilateral of

(1) 1 Square kilometre = 247.114 acres.

the oasis from Cufra to Giarabub (1). The generally accepted average area is a million square kilometres. The breadth from east to west is about 1500 kilometres (2) and the length from north to south, measured from the extreme points including Fezzan, 1150 kilometres.

Libya has no geographical unity. It is, as Reclus wrote, composed of various countries separated the one from the other by uninhabited and even uninhabitable solitudes; for the desert, or at least the steppes which precede it, reaches to the coast of the Syrtis Major. The territory between Cyrenaica on the east and the Gariana Mountains in the south of Tripoli has characteristics both of the Mediterranean zone and of the Sahara, but South Tripoli belongs wholly to the desert. This state of affairs is today taken into account when Libya is divided into two great districts, Tripoli and Cyrenaica.

The southern frontier of Tripoli, properly so called, is marked by the northern boundary of the high stony plateau, known as Hammada el Homra, in which vegetation ceases. To the west Tripoli stretches as a homogeneous district as far as the beginning of the dunes of the Great Eastern Erg and the Duiat Mountains, the natural limit of Gefara, which is crossed by the Ouadi Mocta, the political frontier of Tunisia. To the east the apparent natural frontier is the western shore of the Syrtis Major as far as Ouadi Semseni, beyond which point the characteristics of the northern steppe are lacking. Physically there are three regions in the district of Tripoli, the coast, the plain or Gefala and the high plateau or Gêbel. In a wide sense Cyrenaica comprises all the territory which extends from the Syrtis Major and the Mediterranean coast on the north to the oases of Angila and Gialo on the south and to the Gulf of Sollum on the east, that is from 19° to 25° longitude and from 29° to 33° northern latitude.

The population is estimated at between 900,000 and a million.

B. Administrative Organization. - The administrative organization of Libya is principally based on the royal decree of 9 January 1913, no. 39, which provided for the organization of government in Libya (3), and on the royal decree of 15 January 1914, no. 35, which approved the political administrative organization of Tripoli and Cyrenaica (4). In virtue of these decrees Tripoli and Cyrenaica were formed into two separate governments, each directed by a governor who also commands the land and sea forces on the land and waters within his jurisdiction. He is nominated by royal decree on the proposal of the Minister of the Colonies in concert with the Minister of War, both of whom have been advised by the Council of Ministers. He depends immediately and exclusively on the Minister of the Colonies, and he directs the colony's policy and administration in conformity with that minister's instructions. He may make rules of a

(1) According to *Annuario Statistico Italiano*, 1914, the area of this is from one to one and a half million square kilometres.

(2) 1 kilometre = 1093.633 yards.

(3) *Gazzetta Ufficiale d'Italia*, 14 February 1913, No. 37.

(4) *Ibid*: 7 February 1914, No. 31.

local character and impose penalties for their infraction. The Minister of the Colonies may delegate to the governor such powers emanating from the royal government in respect of Tripoli and Cyrenaica as are susceptible of delegation.

The seats of the governments of Tripoli and Cyrenaica, are, respectively, at the towns of Tripoli and Benghazi. The officials depending immediately on the governor are the general secretary for civil and political affairs, the chief of the military police office and the chief of the headquarters staff. The general secretary for civil and political affairs is nominated by royal decree on the proposal of the Minister of the Colonies and has the rank of a prefect. He must follow the governor's general instructions, is at the head of all civil offices and treats directly with the local authorities and native chiefs within the areas or parts of areas which have, on the governor's proposal, been declared zones of the civil government.

The territory of Tripoli and Cyrenaica is divided into regions, *circondari*, and urban or rural districts. At the head of a region there is a general commissioner on whom depend the delegates of *circondari* who are at the head of these. In the capital of the government the functions of regional commissioner and delegate of *circondario* are assigned to the general secretary of civil and political affairs. In the capitals of regions the functions of delegate of *circondario* are assigned to the regional commissioners. The urban district depends on the delegate of *circondario* and is directed by a municipal administration. A district agent is placed over the central district and depends on the delegate of *circondario*. At the capitals of *circondari* the functions of district agent are discharged by a *circondario* delegate. In special cases one or more *circondari* or districts may be placed in direct dependence on the governor or the special commissioner.

The regional commissioners are exclusively nominated from among the Italian civil or military officials. The *circondario* delegates and district agents are generally chosen from the native dignitaries and chiefs who are Italian subjects. Within his region the regional commissioner represents the governor, and in accordance with the latter's instructions he exercises the functions which devolve on him in virtue of laws and decrees, or which are delegated to him by the governor.

Article 6 of the rules specifies the functions of the governor; article 7 those of the *circondario* delegate; article 3 those of the district agent.

The institution of native councillors and regional councils gives the native population a legitimate means of expressing their opinions and aspirations. Native councillors are therefore nominated at the seats of government on the governor's proposal, and they advise, either together or separately, on questions of administration which are of interest to the government and on which the governor thinks it well to hear them. In every regional capital a council is formed, composed of the commissioner as president and a native chief or notable for each circumference and district within the region. The governor chooses one of these for each of the territorial divisions on the advice of the respective delegates and agents. Italian citizens and subjects, nominated by the governor and as numerous as

he judges opportune, also belong to this regional council. It is wholly renewed every three years.

Not only does this council pronounce on business submitted to it in conformity with laws and decrees, but it also advises on questions interesting to the *circondario* which the commissioner deems it well to bring before it. Clause II of the royal decree of 15 January 1914, no. 35, amply treats of the organization of urban and rural districts.

In the matter of the consultative agencies of the colony, of which we have just spoken and with which chapter II of the first clause of the cited decree is concerned, it should be noted that the royal decree no. 469, dated 11 March 1917, lately made certain pertinent modifications (1). In accordance with this last named decree native consultative committees for Tripoli and Cyrenaica and a central mixed consultative committee at the Ministry of the Colonies at Rome were created.

Other ordinances contributed to giving either at home or within the colony a special structure to the governmental function, suited to the particular exigencies it has to meet.

Thus at the Ministry of the Colonies two consultative committees were formed, one for administrative matters concerned with finance (royal decree of 11 January 1914) and the other for public works (royal decree of 15 January 1914). These comprise a small number of members, especially officials of other great administrative or consultative bodies of the State. As a pendant to the higher administrative committee of the Ministry of the Colonies a council of government, under the presidency of the general secretary and composed of the chiefs of local offices, has been constituted at Tripoli and at Benghazi.

Since the law of 25 February 1912 established Italian sovereignty over Libya it was necessary to make clear the jurisdictional relations of the population with the State and regulate relations among subjects. The need was met by the royal decree of 6 April 1913 which established, in harmony with the principles of Mussulman public law, that all Mussulmans residing in Libya are by presumption Italian subjects and that they can lose such status only if they are freed from it by the government. The decree determines who are to be considered subjects in virtue of birth, ties of blood or marriage; and it admits subjects to service in the territorial and maritime colonial forces and in the colonial administration. The pertinent rules were comprised in the royal decree of 6 February 1913 as to the civil service of the State.

Administration of justice in Libya is regulated by the royal decree of 20 March 1913.

Other decrees concern the police, the health service (2), the organization of schools (3) and of public services and works (4), rules for the con-

(1) *Gazzetta Ufficiale*, No. 72, 27 March 1917.

(2) Royal Decree of 8 January, no. 15, as 1914, to the sanitary organization of Tripoli and Cyrenaica.

(3) do. of 15 January 1914, no. 56.

(4) do. of 15 January 1914, no. 76.

struction and working of the State railways (1), the military organization (2), the organization of the postal and electrical services (3), the code of the merchant navy (4), etc.

§ 2. THE LAND SYSTEM.

From the time Libya was first occupied, on 20 November 1911, a royal decree forbade, with a view to preventing speculation and engrossment, the purchase and sale of land. But this measure has an obviously transitory character and did not make any less urgent the solution of a problem which had early shown itself to be very difficult and of capital importance, the problem namely of organizing property in land.

Under Turkish dominion the cadaster applied in Libya, although only in part of the territory, made the proof of title to a property depend on the registration of particular holdings, and therefore ownership of a holding could only be proved by presenting a document called the *tapû* which showed that it had been regularly inscribed on the land registers. But during the war all the land offices were destroyed and the registers and documents were dispersed.

The royal decree of 26 January 1913, no. 1913 (5), is concerned with the proof of rights to land in Libya. For the purpose of such proof land offices were set up in the principal centres of the colony to provide for the determination and preservation of landownership. To each of these offices a consultative commission of notables is attached.

These offices must keep special registers containing all necessary data for the exact determination of properties and rights in them, the description of the real estate or the rights held in real estate, its boundaries, area, the nature of the right or title to it, general remarks as to the title-holder, rights of property burdening it, rights-of-way with necessary indications as to how these affect the new title-holder, and, where title-deeds are onerous, the price of such deed. A register is divided into two parts, the one for urban and the other for rural property, and is kept in chronological order in the Italian and Arabic languages.

In addition to the general register another register must be kept in every land office; (a) for the domanial properties (*miri*); (b) for the property of religious foundations (*vacuf*); (c) for the property held collectively by tribes and villages (*metruke*); and (d) for the property held freely (*mulk*).

Ottoman land registers which still exist or which can be reconstituted give complete proof of free property (*mulk*), and also of absolute titles to property (*tapû*) formerly ceded under the Ottoman cadaster, of provisional

(1) *Gazzetta Ufficiale*, of 9 March 1913, no. 314.

(2) do. of 22 January 1914.

(3) do. of 12 June 1913, no. 708.

(4) do. of 23 June 1913, no. 902.

(5) do. no. 34, 11 February 1913.

titles ceded by the former agencies of the local cadasters, and of the acts of transference (*huggé*) ceded by the cadis before the institution of the cadaster. Saving where the Ottoman land registers still exist it is required that existing possession and title shall correspond. Contracts of purchase and sale made after the royal decree of 5 November 1911, no. 1247, and final pronouncements of the judicial authority are absolute evidence of free property if they do not violate the royal decree of 20 November 1911, no. 1248, and if the seller's title has been remitted to the purchaser or annexed to the contract of sale. Such titles are valid as full proofs if they are not impugned as being false and if certificates of them are definite in character, except in the following circumstances.

For every property definitely certified there is drawn up a new title in which the reference of the title and of other relevant documents, from which the ownership has been ascertained, is indicated, and in which all data prescribed for the land register must be found. The new title is remitted to its holder on presentation of the old title, except when the latter is proved to have been lost or destroyed. The old title is then annulled and delivered to the keeping of the land office.

Rights definitely established and certified are inscribed, in conformity with the new title, in the general register and on the land books.

Rights definitely certified and established cannot be impugned by anyone, except 1) in the case of fraud, falsification or error affecting fundamentally the fact established; 2) when a document proving the contrary fact and not previously produced is found after certification; 3) by *force majeure*; or 4) another and contrary certification having reference to the same property. These actions for annulment are not detrimental to the rights which third persons may have acquired, in good faith and for considerations, in the real estate in question. The actions are brought before the local judicial authority to contradict and oppose the persons in whose favour certification has been made. These actions and their results are noted in the general register and the land books.

If the titles already mentioned contain omissions or imperfections certification is made provisionally, on the basis of actual possession and all the evidence of property to be discovered, including certificates (*il muhaber*) of the Imans and Mukhtars. When once instructions have been issued, following the procedure indicated in article 10 of the aforementioned royal decree of 26 January 1913, the provisional title is registered and remitted, the registration and remission being publicly declared.

Within two years of the time of declaration any interested person may impugn the provisional certification before the local judicial authority. If after two years no objection has been raised or only such as has been met, the registration becomes definite and the title-holder receives a definite title. All transferences or assignments of property, whether from one living person to another or in consequence of a death, a division of property or the formation of a society, and every constitution or cession of property rights, must be entered in the registers of the land books and on the title,

and are valid, even among the parties concerned, only from the date of such entry.

The land books are public. They may be consulted or extracts from them may be obtained as the ministerial decree of 20 July 1913 rules.

This decree approved the rules to be followed in executing the royal decree of 26 January 1913, no. 48, which we have already resumed, as to the certification of property rights in Cyrenaica and Tripoli. Chapter I of these rules concerns the land offices, namely their formation and staff, and the nomination of the consultative commission which must advise in all cases of impugnments of provisional certification. Chapter II treats of the land registers, both general and special, for (a) the domanial property; (b) the property of Mussulman religious foundations; and (c) property held collectively. Chapter III treats of the land books of free property, the complementary land books and registers of papers, and inscription in the land books. Chapter IV deals with definite and provisional certification of free property, general rules for certification, applications for certification, deeds and papers of certification, special rules for the provisional and final certifications of free property, impugnments of provisional certification, actions against certification and judgements against the negative results of certification. Chapter V concerns the certifications of property rights in estates of the domain, held by Mussulman religious foundations or held collectively. Chapter VI deals with titles to free property and the cession of these, final or provisional titles and complementary papers, and the cession of titles. Chapter VII treats of registration after certification, general rules, various operations involving new entries in the land books owing to the rectification of a material error, new construction, division, modification of the condition of real estate, etc., and variations relative to the different categories of properties. Chapter VIII is concerned with general provisions, the keeping of registers and land books, the responsibility of the staff, penalties, annulment of titles, delivery of duplicates, copies, extracts and certificates, inspection of registers and land books, and operations preparatory to the formation of the geometrical cadaster. Chapter IX contains provisional measures.

§ 3. AGRICULTURE AND COLONIZATION.

A. -- *Measures in favour of Agriculture.* — Certain and complete data as to agricultural conditions in Libya cannot yet be given. The time which has elapsed since the Italian occupation is too short and the events of the war have often prevented the necessary investigations. There are two reports on the subjects but they confine themselves to some zores and cannot therefore be considered as giving a complete exposition, and moreover they are largely concerned with technical matters. They are the following :

(1) *Relazione del Primo Viaggio della Commissione nominata dall'on. F. Nitti, Ministro di Agricoltura, sub tema Ricerche e Studi Agrologici sulla Libia.* — I. *La Zona di Tripoli* (*Report of the First Voyage of the Com-*

mission nominated by the Hon. F. Nitti, Minister of Agriculture, as to Agrological Researches and Studies on Libya. — I. *The Zone of Tripoli*). Bergamo, Istituto italiano d'arti grafiche, 1912.

(2) Commissione per lo Studio Agrologico della Tripolitania nominata con D. M. dell'11 febbraio 1913. — *Ia Tripolitania Settentrionale (Commission for the Agrological Study of Tripoli nominated by Ministerial Decree of 11 February 1913 — Northern Tripoli)*. Two vols. Rome, Bertero, 1913.

To these two official reports there must be added the results of the mission of Signor Leopoldo Franchetti to Tripoli for the study of the Gebel, published under the title “*Società Italiana per lo Studio della Libya. Ia Missione Franchetti in Tripolitania. Il Gebel*” (*Italian Society for the Study of Libya. The Franchetti Mission in Tripoli. The Gebel*). Florence, Milan, Treves, 1914. To this is annexed a second volume prepared by R. Pampaninini on the flora of Tripoli, namely “*Plantae Tripolitanae ab auctore anno 1913 lectae et Repertorium Florae Vascularis Tripolitanae*”, Florence, Pellas, 1914.

In view of our imperfect knowledge of agricultural conditions in Libya we will merely note certain data as to the types of crops now grown in the colony. They are as follows:

(a) *In the irrigated gardens* trees and grasses are grown on a small scale by settlers and their value realized directly. These gardens are generally found in larger or smaller groups - oases - distributed along the coast, and occur very rarely in the interior.

(b) *In the enclosed unirrigated domains* special kinds of trees are usually grown or else olive-trees together with cereals, the winter floods aiding culture in both cases. These domains are usually at the bottom of the basins formed by the hills.

(c) *In the domains for growing trees* olive and fig trees are grown without irrigation, by themselves or together with cereals. They occur especially in the mountain territory, as in Msellata and Garian.

(d) *The badia land*, otherwise the steppes, is used for pasturage and for the limited and occasional cultivation of cereals.

(e) *The midian* are in special cases used for the almost or quite continuous growth of cereals.

The cultivable land of Libya is as regards its smaller part cultivated by irrigation, effected as economically as possible in order that the water may not uselessly run out to the sea or be lost in systems of irrigation. The larger part of the land is cultivated without irrigation by the aid of the agricultural technique special to arid soils. If there is subterranean fresh water at no great depth it would be possible to extend irrigated agriculture at various points in the colony and thus to bring vast zones of territory under irrigated cultivation. It would also be possible to extend the flooded crops in the depressions of the hill country, and it would be useful to investigate the possible means of using on the plain the water of torrents which now is lost in the sea. On almost all the rest of the agricultural land the trees and grasses of the unirrigated land might be grown profitably if a scientific technique were adopted. On the parts of the steppe not used for agricul-

tural crops stock-farming, and especially sheep-farming, could be improved and rendered markedly more productive than it is at present, care being given above all to watering the animals and preserving them in healthy condition.

Pending more effective action in favour of agriculture some measures were esteemed necessary to lessen the depression affecting agricultural conditions. Among these one was urgent, namely a provision, however rudimentary, of agricultural credit for the natives; for the Ottoman agricultural bank went into liquidation immediately after the Italian occupation and some grants made directly by the colonial authorities did not sufficiently take its place.

The royal decree of 9 March 1913, no. 262 (1) for Tripoli authorized the branch of the *Banco di Sicilia e Tripoli*, supported by the Bank of Italy, and the royal decree of 6 November 1913 for Cyrenaica authorized the branch of the Bank of Italy at Benghazi, to effect operations in agricultural credit so long as these banks employed their own capital with the government's limited security, together with the capital already lent by the colonial administration and capital arising out of the liquidation of the Ottoman agricultural bank, the further management of which was entrusted to these banks (2).

It was also necessary to solve a grave problem arising out of the large extent of land, of the most fertile description, especially near the town of Tripoli, which had been entirely abandoned, either because former possessors were dead or had emigrated, or because the prospect of larger earnings has drawn them to the towns and they had alienated their property in defiance of the prohibition of sales, and the buyers had not considered it wise to show themselves. The ruin of wells and cisterns and the progressive invasion of the sand were to be feared, to say nothing of other losses.

The royal decree of 6 September 1913, no. 1106 (3), did not aim, as some wrongly think, at facilitating Italian colonization, but at bringing owners back to cultivate their lands or, failing this, at bringing other natives, by preference, to take their places, as public interest dictated. This decree allowed concessions for three years of abandoned lands, such concessions to be renewable for the same period if the owner did not meanwhile present himself or if, on presenting himself, he did not pay the concessionary the value of the improvements and repairs made by the latter during his occupancy.

The application of this decree at once gave satisfactory results.

The royal decree of 20 March 1913 provided against the loss which would ensue on an excessive exploitation of the palm-trees for it fully regulated the extraction of *laghbi*; and the royal decree of 11 January 1914 re-

(1) *Gazzetta Ufficiale*, 8 April 1913, no. 82.

(2) This matter was afterwards regulated by the *Norme Provvisoire per la Concessione dei Prestiti Agrari*. (Provisional Rules for the Granting of Agricultural Loans) of 15 October 1915.

(3) *Gazzetta Ufficiale*, 6 October 1913, 232.

gulated the esparto harvest, the purchase in the gross of this product and trade in it.

B. — *Attempts at Colonization and Criteria on which they were based.* — As things are at present little can be said on the subject of colonization. We will merely advance some considerations and reproduce some data of a general character.

The types of domain which may most profitably be chosen for the future colonization of Libya, according to the selection made by the Commission for the Agrolological Study of Tripoli, nominated by a ministerial decree of 11 February 1913, are the following :

(a) Exploitation by irrigated crops, if a very intensive system of agriculture leading to the production of plum-trees, fruit, vegetables and various industrial plants, be adopted ;

(b) Exploitation by entirely dry or flooded crops, extending over a very large area, say 200 to 300 hectares, the mixed culture of trees and grasses being practised ;

(c) Pastoral exploitation depending principally on sheep-farming, on the principle of a central domain or nucleus and a greater or less extent of steppe used as pasturage.

In certain circumstances unirrigated, enclosed domains may also be adopted for colonization, but this type of agriculture seems to be the least profitable.

The first experiments in colonization in Libya were made by the Royal Agrarian Office of Tripoli, formed by a royal decree of 2 March 1914, no. 179. To this office duties were entrusted which may be divided into two very distinct groups : the first comprising those of an essentially administrative nature, including investigations and measures tending to favour native and colonial agriculture and to stimulate and encourage colonization by Italian agriculturists; the second those of a technical and economically agricultural nature which concern the whole programme of practical experiment.

In carrying out these first colonizing experiments the principle has been adopted of associating the action of the State with private initiative, in other words the government's action has been completed by that of individuals with a view to avoiding the danger of patchwork colonization inspired by no guiding idea.

By the royal decree of 13 July 1914, no. 726, the governor of Tripoli was empowered to make grants of the lands of the domain. He was in a position to carry out, by means of the staff of the Agrarian Office of Tripoli, an organic and scientific programme of colonization based on the general criteria already established by the central administration.

This measure was otherwise justified by the necessity of leaving to the local government, in the initial period in which all the elements contributing to determine economic conditions in general and the agricultural condition of the colonies in particular were not yet known, that freedom of action which is quite indispensable if colonizing activity is not to be sub-

jected to the influence of prejudice and dominated by restrictions from which grave and irreparable errors may arise.

As regards methods of alienating land it should be remembered that free grants and sales had equally to be excluded, since the former may bring to the colony grantees who have not the means to carry on scientific and intensive colonizing action, as certain incontrovertible data furnished by experience and the history of the chief colonizing nations show, while the latter seems to be equally unsuitable. Even leaving aside the fact that to allow sales may give rise to speculation, there is the probability that purchasers will spend on their purchases the capital which could profitably be used on the improvement of their property. The only remaining alternative was therefore that of an improving contract, which was considered in the case of very extensive lots to be a long lease involving no right of purchase; and in that of small lots to be a long lease of property redeemable in a period of from fifteen to twenty-five years. This form offers, in addition to the advantages always present in an improving contract, the advantage that it allows the action of individuals to be completed by the government, for an obligation is placed on the concessionary to allow the technical staff of the Agrarian Office, who are charged to superintend and control his agricultural activity, to have access to his holding.

When the form of a long lease has thus been chosen for concessions it was thought best to treat individually, this method seeming most advisable among those presenting themselves. It is indeed obvious that during the first year of such very important experiments the method of sales by auction would have incurred the grave risk of bringing to the colony persons most unsuitable to the practice of agriculture, especially since the amount of the annual rent was made as low as possible.

In choosing concessionaries the criteria followed were neither vague nor arbitrary. The applications received were examined with scrupulous care and preference was given to societies of agriculturists or to single agriculturists who seemed to offer the best guarantees of a serious success.

In drawing up the deeds of concession the following principles were adopted:

(1) For concessions of large lots:

The piece of land is ceded to be enjoyed for a determined number of years, fifty or seventy-five, without right of purchase on the part of the concessionary who must pay an annual rent, fixed at a very low rate for the first years, and at a higher rate for subsequent years in which, since he has fulfilled the necessary terms of the contract, he sees his annual income increase.

The concessionary is bound to execute within determined periods, on pain of the revocation of his contract, stipulated works and plantations. He is also obliged to reside in the colony or to cause to reside on the property a technical administrator or manager, placed over it as his special deputy in administrative and judiciary matters. Finally he must allow the technical staff of the Agrarian Office to have access to the property in order to see that the clauses of the contract are exactly executed.

On the other hand the concessionary has the right to exemption from taxes and remission of rent in determined cases, and, other things being equal, should have a preference if new concessions are on any pretext eventually made by the State.

(2) For concessions of small lots :

These lots have an area of from three to thirty hectares and exceptionally of fifty hectares. They are reserved exclusively to small agriculturists who dispose of the capital necessary to bringing them under cultivation. They are ceded for ninety-nine years, with a right of purchase to the concessionary who has scrupulously fulfilled the stipulations of the contract at the end of twenty-five years, or in exceptional cases at the end of fifteen years, the terms to be counted from the day on which possession was taken.

Even in the case of the concession of small lots the concessionary is bound to carry out determined works and plantations, and has the right to special exemptions and remissions of rent.

It is evident that it is the chief aim of these concessions of small lots, to which the Agrarian Office devotes the greatest care, to favour and encourage the agriculture on a small scale which has given excellent results in certain conditions, especially when colonization has been in its first stages.

In the beginning of 1915 concessions were made, as appears from the *Bollettino di Informazioni* of the Ministry of the Colonies (1), of four large lots of land having a total area of 986.50 hectares and thirty-nine small lots, ceded to small agriculturists, having a total area of 548.26 hectares.

But, as has been said already, the colonization of Libya is still only beginning.

(1) 3rd year, no. 1, January 1915. Rome, Bertero, 1915.

GREAT BRITAIN.

AGRICULTURE AND THE WAR.

OFFICIAL SOURCES:

- THE DEFENCE OF THE REALM REGULATIONS. REGULATION 2 M AS TO LAND IN GREAT BRITAIN NOT CULTIVATED SO AS TO INCREASE FOOD SUPPLY. Amendments in Defence of the Realm Regulations made by Order in Council of March 13th, 1917.
- THE CULTIVATION OF LANDS ORDER, (No. 3), 1917, dated March 15, 1917, made by the Board of Agriculture and Fisheries. The above are printed in *Defence of the Realm Manual*, 3rd enlarged edition, H. M. Stationery Office, London, March 1917.
- CIRCULAR LETTERS OF THE DIRECTOR GENERAL OF THE FOOD PRODUCTION DEPARTMENT OF THE BOARD OF AGRICULTURE AND FISHERIES to County Agricultural Executive Committees in England and Wales. *The Journal of the Board of Agriculture*, Vol XXIV. No. 3, London, June 1917.
- THE WORK OF THE AGRICULTURAL EXECUTIVE COMMITTEES in Bulletin No. 1, Series B, issued by the Food Production Department of the Board of Agriculture and Fisheries.

Some account has already been given of the efforts made by the British government to increase the production of food in the country. We here attempt an analysis of the machinery intended to secure the maximum production of the cultivable lands.

§ I. THE LEGISLATIVE BASIS OF THE ORGANIZATION.

The existing provisions as to the cultivation of lands are based on an amendment, passed on 13 March 1917, of Regulation 2 M of the Defence of the Realm Regulations. This amendment gives certain powers as regards England and Wales to the Board of Agriculture and Fisheries, and as regards Scotland to the Board of Agriculture for Scotland, which bodies exercise their powers "after such consultation with the Food Controller as may be arranged" and where they "are of opinion that, with a view to maintaining the food supply of the country, it is expedient".

They may "enter on and take possession of any land which in their opinion is not being so cultivated as to increase, as far as practicable, the food supply of the country, and, after entry thereon, do all things necessary or desirable for the cultivation of the land or for adapting it for cultivation; and for such purposes enter on and take possession of any buildings on the land or convenient for such purposes". They may "take possession of any machinery, implements of husbandry or plant..., or any farm produce, stock or animals... required for the cultivation of land or the increase of

the food supply of the country ". They may " by notice served on the occupier of any land require him to cultivate the land in accordance with such requirements as the Board may think necessary or desirable... ; and by notice served on the tenant of any land, which or part of which in the opinion of the Board is not being so cultivated as to increase as far as practicable the food supply of the country, determine his tenancy of the land... ; and after entry on any land arrange for its cultivation by any other person whether by contract of tenancy or otherwise. An occupier of land may, with a view to maintaining the food supply of the country, submit to the Board a scheme for the cultivation of the land in a manner not consistent with the contract of tenancy of the land, and the Board, if satisfied that the adoption of the scheme is necessary or desirable for the maintenance of the food supply, may direct that the land shall be cultivated in accordance with the scheme, subject to any modification which the Board may think fit to make therein ". " If the Board at any time withdraw from possession of any land of which possession has been taken under this regulation, they may recover from the person then entitled to resume occupation of the land such amount as represents the value to him of all acts of cultivation or adaptation for cultivation executed by the Board ". " The Board may with respect to any land... authorize any person or any body constituted by the Board to exercise on behalf of the Board any powers of the Board under this regulation and prescribe the procedure of any such body ".

§ 2. THE AGRICULTURAL COMMITTEES IN ENGLAND AND WALES.

a) *The War Agricultural Executive Committees.*

As regards England and Wales this regulation was completed by an order of the Board of Agriculture and Fisheries, made on 15 March 1917, which defined the powers of the War Agricultural Executive Committees who had previously been governed by an order of 20 February 1917. This new " Cultivation of Lands Order " states that " the persons who are for the time being appointed by a county council of an administrative county to act as members of the War Agricultural Committee for the county are hereby constituted as the body to exercise the powers conferred on the Board " by the regulation. " The body hereby constituted shall maintain an executive committee consisting 1) of members appointed by the said body, not less than four nor more than seven in number, unless the Board otherwise direct, and 2) of such additional members as the Board may appoint. In the case of a county in Wales (including Monmouthshire) two of the members so appointed by the body hereby constituted shall be the members representing the council of the county on the Welsh Agricultural Council... An executive committee shall from time to time report their proceedings to the body constituted by this Order for the county, but the acts of the committee shall not be subject to confirmation by that body... Accounts shall be kept by an executive committee of their receipts and expen-

diture and be open to inspection by any officer of the Board, and those accounts shall be made up and audited in such manner as the Board shall direct... An executive committee may, subject to any directions given by the Board, appoint such sub-committees as the committee thinks fit. A sub-committee may consist either wholly or partly of persons not being members of the executive committee". A saving clause provides that the executive committee "shall not enter on or take possession of any common land as defined by this Order, without a further consent given by the Board".

Thus in England and Wales the machinery for the intensification of agricultural production consists in each county of a War Agricultural Committee, the directing body, on which depends a War Agricultural Executive Committee, which leaves certain duties to sub-committees.

b) The District Sub-Committees.

In May 1917 the Director-General of the Food Production Department of the Board made certain suggestions to the Agricultural Executive Committees in England and Wales as to these sub-committees. "As a rule", he stated, "it is desirable that the county Executive Committee should divide the county into convenient districts for the purpose of the increased production of food, which would in most cases correspond with the existing Rural Districts, and should appoint to each district a Sub-committee of not less than four or more than seven members, having experience in agriculture and willing to attend meetings regularly during the war... A district committee should meet at least once a fortnight and if possible once a week... It should keep minutes of its proceedings and forward a report after each meeting to the County Executive Committee and to the Board of Agriculture's commissioner for the district. It should appoint one or more persons experienced in agriculture as its correspondents and representatives in each parish or convenient group of (usually not more than three) parishes in the district... It should report to the County Executive Committee any land within its district which is from any cause not at present producing its full quota of food for the nation, suggest the action necessary to obtain the best possible output of food from the land, and assist the County Executive Committee in carrying out any measure which it may decide to take with that object... It should report to the County Executive Committee any grass land which in its opinion ought to be ploughed up for the 1918 cropping. It should report any special cases of labour shortage and should see that farmers needing labour are put in touch with any available source of supply... It should co-operate closely with other organizations for the supply of labour, such as the Women's War Agricultural Committee and the Agricultural Representative of the National Service Department. It should assist farmers in obtaining through the County Executive Committee good seed and manures, spraying materials for potatoes and, where necessary, the use of horses and implements. It should do everything in its power to facilitate the working of any motor tractors and steam tackle available in the county, and make known to farmers the terms on which their use can be obtained. It should call the attention of farmers to the facilities for obtaining credit from the

banks through the County Committee under the scheme arranged by the Board. It should help to organize measures for the destruction of rabbits, rats, rooks, sparrows and other pests... It should report any difficulties in maintaining the food supply due to the land being detrimentally affected by the blocking of water-courses or the holding up of water by mill-dams and locks. It should assist the provision of land for allotment where needed, encourage the adoption of co-operative methods for the purchase of seed, manures, etc., and take steps to see that all existing allotments and gardens are fully cultivated... While it must be borne in mind that the County Committee cannot delegate to a Sub-Committee the executive powers conferred on it by the Order, it should endeavour to keep each Sub-Committee fully occupied with work of a responsible character, and thus save itself from becoming overburdened with a mass of detail which can be better dealt with by men of local knowledge".

In many cases the district committees are already doing well and are steadily improving in effectiveness.

c) *The Special Sub-Committees.*

Another circular letter issued by the Director General of the Food Production Department to the War Agricultural Executive Committees, also in May 1917, requested that further sub-committees should be formed in each county to undertake certain duties, in particular a Labour Sub-committee, a Machinery Sub-committee and a Supplies Sub-committee. Each of these sub-committees should consist of "not more than two members of the Executive together with other persons co-opted from outside".

As regards the *Labour Sub-Committees* the circular stated that "in many counties a sub-committee has already been appointed to deal with the distribution of soldier labour, but its functions should be extended to deal with matters relating to the supply, distribution, housing and wages of all forms of labour... In view of the necessity of encouraging the employment of women, and particularly of those women who have been trained under the Board's scheme, the Organizing Secretary of the Women's War Agricultural Committee should be co-opted as a member of the Labour Sub Committee... The Labour Sub-Committee might deal also with the supply and distribution of Army or other horses and with any questions that will arise under the *Billeting of Civilians Bill*".

"In view", the circular states further "of the new duties entrusted to the committees..., and of the volume of work involved in making arrangements for the ploughing up of the quota of grass land apportioned to each county, it will be essential to appoint a special sub-committee for the purpose. It should be called the *Machinery Sub-Committee* and should deal with the work of the (government) tractors and the sets of steam tackle in the county, and should also be responsible for the organization of all kinds of agricultural machinery, especially threshing machines".

The increased quantity of fertilizers, seeds and other agricultural supplies which will be needed owing to the increased arable area is alleged as the reason for the appointment of a special *Supplies Sub-Committee*. "It

should consist of two members of the Executive Committee together with representatives of the principal dealers, merchants and agricultural co-operative trading societies in the county... The sub-committee should use their influence to ensure that all land in the county is adequately and properly manured, and should undertake any purchases needed for land on which the Executive Committee enter under the Cultivation of Lands Order. The Food Production Department will be prepared to give the sub-committee any advice and assistance in their power as to the supplies, prices, etc. of requirements".

It is suggested finally that "Executive committees may find it desirable to appoint other sub-committees to deal with such matters as finance, the survey (on which the District Value of the Land Valuation Department should be appointed), and other branches of the work".

d) *The Application of the Cultivation of Lands Order by the Agricultural Executive Committees.*

The administration of the Cultivation of Lands Order is the most important and most delicate duty of the County Executive Committees.

It is of course essential that they should obtain accurate and unbiased opinions on which to found their action, and here their difficulties begin. In some cases the district committees are not sufficiently manned by farmers, and considerable time is therefore wasted in dealing with their reports which have to be referred back to a special panel of practical farmers and a valuer. In other cases, where district committees are composed chiefly of farmers, these are not always willing to give information as to the state of the lands of their brother farmers, and are inclined to think nothing important except the facilitating of their task by the provision of labour, machinery and other necessities.

An Executive Committee can in the first place send a mere *recommendation* to a farmer. "In the majority of cases", writes a commissioner, "the farmers agree to carry out the suggestions of the Executives", and most other commissioners report to the same effect. One County Executive sends to the farmer concerned a form which has on its face a polite recommendation and on its back a list of its own summary compulsory reserve powers. The results are said to be satisfactory. When the existing occupier agrees to carry out the recommendations of the Executive, it is necessary to see that his promises are performed. Here especially the District Sub-Committees can be useful.

If a farmer is unable to fulfil the requirements of the Executive it becomes necessary to supplement his efforts or to replace him. This can often be done *by agreement*. The committee can help him by carrying out specified acts of cultivation, or by taking over and transferring to a neighbour some of his land, for instance the arable part of his farm. When a tenant is thoroughly incompetent or refractory his tenancy must be determined summarily. Before invoking the powers of the Board of Agriculture it is often possible to carry through this matter by agreement between owner and tenant under the advice and pressure of the committee. A satisfactory

tenant may then be installed, the owner may undertake to farm the land himself, or the committee may, in the last resort, undertake its cultivation.

When all else fails it becomes necessary to use *compulsory powers*. The Executive Committee can direct a farmer to carry out an improved system of cultivation under penalties for disobedience; can enter on his land and carry out on it specific work, such as ploughing or manuring, recovering the cost from him; can transfer part of his land to a neighbour or other substitute; or, finally, can ask the Board summarily to end his tenancy replacing him by someone more efficient or farming the land themselves. In cases of such eviction it is sometimes possible to prevent hardship by leaving the old tenant in possession of the farmhouse for a time.

Reports show that the Executive Committees are taking action in all these ways. Advice and persuasion are being used in numberless cases and where these fail most committees have no hesitation in applying some of their more drastic powers.

Even when landowners are not themselves farming any land committees have sometimes been able to put pressure through them on unsatisfactory tenants. In many cases improvement on badly cultivated lands has been secured by the help of the landowner or his agent.

§ 3. THE ORGANIZATION IN SCOTLAND.

No order corresponding to the Cultivation of Lands Order has been made by the Board of Agriculture for Scotland. But *District Agricultural Executive Committees* have been formed for most of the Scottish counties, and the Board exercise their powers under Regulation 2 M as amended in March 1917, which we have already cited, through these committees who have Executive Officers. Certain of the more remote districts are worked *by the Board directly*.

Where, in the opinion of a committee, the occupier is using his lands for the production of crops at present unprofitable from a national point of view, or is cultivating his land inadequately, and where their representations have proved ineffectual, the committee recommend the Board to exercise their powers under the amended regulation.

Failure to cultivate the land in accordance with a direction of the Board constitutes a summary offence against the Defence of the Realm Regulations.

Schemes which override restrictive clauses of leases under the amended regulation must be submitted in the first instance to the local committee. The committee discover whether the tenant submitting such a scheme has sought and failed to obtain its approval by his landlord. If they are satisfied that the scheme will lead to increased production of food they endeavour, by negotiation, to secure the landlord's consent to its adoption. If such negotiation fail they report the matter to the Board, who may subsequently issue a direction that the land in question be cultivated in such specified manner as they think proper. Any question as to payments by the State to the landlord for loss thus occasioned will be referred, in default of agreement, to the Defence of the Realm (Losses) Commission.

NOTICES RELATING TO AGRICULTURAL ECONOMY IN GENERAL IN VARIOUS COUNTRIES.

AUSTRIA.

1. WITTSCHIEBEN (Dr. Otto) : Die Bauernlegungen in Steiermark 1903-1912. — Die Zwangsversteigerungen land- und forstwirtschaftlicher Grundstücke in Steiermark 1903-1912. (*The Transformation of Peasants' Holdings in Styria 1903-1912. The Sales by Auction of Agricultural and Forest Land in Styria*), prepared by Dr. Otto Wittschieben, director of the Provincial Office of Statistics at this office. — Graz, Lensehner and Lubensky, 1916.

This publication is divided into two parts, of which the first is concerned with the formation of large properties by aggregating rural holdings, and the second with the forced auction of agricultural and forest holdings in Styria between 1903-1912.

The word *Bauernlegungen* which is included in the title of the first part, needs explanation. It is used in its wide sense to signify the passage of a holding hitherto entirely cultivated by peasants into the tenure of persons of a different social position who will cultivate it on new principles and for a new object. In its restricted sense this word is applied to the sale of rural holdings for the purpose of forming or extending hunting reserves and forest zones.

The author examines the losses occasioned to these holdings by such changes of their ownership, method of cultivation and purpose ; and the interest which the State has in their continued tenure by a rural population as numerous as possible. He enumerates the legislative measures anterior and posterior to the outbreak of war which aim at preventing the aggravation of this evil. Of such legislative measures the most important are : the imperial ordinance of 9 August 1915 (Bulletin of the Laws of the Empire, No. 234), which regulates the alienation of rural and forest property ; the ordinance of 11 August 1915 (*ibid.* no. 235) which contains rules for applying the preceding ordinance ; and the ordinance of the Ministry of Justice of the same date (*ibid.* 236) which enumerates the communes in which the said ordinance is not applicable.

* * *

2. STRAKORCH (Dr. Siegfried H. C.) : Die Grundlagen der Agrarwirtschaft in Oesterreich. Eine Handels- und Produktionspolitische Untersuchung (*The Foundations of Agrarian Economy in Austria. A Study of the Policy of Trade and Production*). 440 pp. Vienna, Tempsky, 1916.

The first part of this book is devoted to the rural economy of the various districts of Austria, examined from points of view as divergent as that

of the nature of the soil and that of zootechniology. It is divided into six chapters which treat separately of the different agricultural districts, and thus it gives a complete and reliable picture of rural-economic conditions in the country.

In the second part the author studies the agrarian problems of Austria in the light of political factors, such as the constitutional rules in force, the population, means of communication and industry; and he shows the importance of these and the influence they have on the development of agriculture.

The third part is concerned with customs' rights and their effect on the rural economy of the country.

In the fourth and last part the author is occupied by the results of the Austrian agrarian policy and the problems of agriculture after the war.

SWITZERLAND.

PUBLICATIONS OF THE SECRETARIAT OF SWISS PEASANTS, No. 54. *La Question Ouvrière Agricole en Suisse* (The Question of Agricultural Labour in Switzerland). — Part IV: Proposals for the Solution of the Problem (conclusion). The Reduction of the Need for Agricultural Labour. Brougg. Secretariat of Swiss Peasants. 194 pp., 1917.

This is the fourth part of the study on agricultural labour in Switzerland and should have appeared in 1913. Obstacles caused the publication to be delayed.

The subject is the measures fitted to reduce the need for agricultural labour. Those dependent on the general organization of the land are dealt with first, then those dependent on the interior organization of farming, and finally those dependent on the direction of farming. The measures dependent on the interior organization of farming regard the substitution of machinery for human labour, the employment of labour saving implements and machinery, and modes of utilizing the soil which economize labour.

UNITED STATES

1. SYSTEMS OF RENTING TRUCK FARMS IN SOUTHWESTERN NEW JERSEY, H. A. TURNER (*U. S. Dept. Agr. Bul* 411 (1916) (pp. 20).

The farms from which records were secured were in Gloucester, Salem, and Cumberland counties. The farms were subdivided into early and late truck farms and also classified according to methods of renting. Among the more general conclusions brought out by this study was the fact that the average labour income of 186 farms, let for a half share of the crops, was \$223 for the tenant and 6.8 per cent on the landlord's investment. The average for 35 farms let for cash was \$206 for

the tenant and 3.7 per cent on the landlord's investment. The bulletin discusses in detail incomes and the system of farming as carried on by the farmers under the various classifications noted above.

* * *

2. MARKETING PERISHABLE FARM PRODUCTS, A. B. ADAMS (*Columbia Univ. Studies Polit. Sci.*, 72 (1916), No. 3, pp. 180).

The author has attempted to point out the fundamental forces which underlie the marketing of fruit, vegetables, and dairy and poultry products, and to suggest methods of controlling these forces so that the cost of marketing may be reduced.

He claims that the social burdens incident to the marketing of perishable goods are due to two main causes — to the inherent characteristics of the goods themselves and to the imperfections in the methods and processes by which they are marketed. Because of the natural perishability of the goods many of them become unfit for consumption before they can be offered to consumers. The natural seasonal production of the goods creates temporary surpluses in the available physical supply, and this adds greatly to the decay of the goods by lengthening the average time between their harvest and consumption. The burden of marketing them is further increased because they must be produced by a small business unit (the farm) and consumed by a smaller one (the family).

He further states that "if we are to reduce the social costs of marketing perishables through a reform in the system of marketing it must be done by finding cheaper and more efficient ways of performing the complicated processes, not by reducing the number of those processes."

1. **LE SERVICE DE PROTECTION CONTRE LES MALADIES DES PLANTES ET LES INSECTES NUISIBLES DANS LES DIVERS PAYS** (The Present Organization of the Services for the Control of Plant Diseases and Insect Pests in the Different Countries). (1914, 350 pages, 4to) Frs. 4.00
2. **PRODUCTION ET CONSOMMATION DES ENGRAIS CHIMIQUES DANS LE MONDE** (Production and Consumption of Chemical Manures in the World). (Second Edition, 1914, 162 pages, 5 diagrams, 2 maps, 16mo) 3.50
3. **LA LUTTE CONTRE LES SAUTERELLES DANS LES DIVERS PAYS** (The Campaign against Locusts in Various Regions) (1916, 188 pages, 16mo) 3.50

(d) Publications of the Bureau of Economic and Social Intelligence.

1. **L'ACTIVITÉ DE L'INSTITUT INTERNATIONAL D'AGRICULTURE DANS LE DOMAINE DE LA COOPÉRATION, DE L'ASSURANCE ET DU CRÉDIT AGRICOLES** (The Work of the International Institute of Agriculture in the Field of Agricultural Co-operation, Insurance and Credit). (In French, German and Italian). (1912, 34 pages, 16mo) 0.50
2. **MONOGRAPHS ON AGRICULTURAL CO-OPERATION IN VARIOUS COUNTRIES.**
Vol. I. (1911, 451 pages, 16mo). (In English and French) 3.50
Do. Vol. II. (1915, 213 pages 16mo). (In English and French) 3.50
3. **AN OUTLINE OF THE EUROPEAN CO-OPERATIVE CREDIT SYSTEMS** (Second Edition, 1913, 72 pages, 16mo) 0.50
4. **L'ORGANISATION DE LA STATISTIQUE DE LA COOPÉRATION AGRICOLE DANS QUELQUES PAYS** (The Organization of the Statistics of Agricultural Co-operation in Certain Countries). (1911, 163 pages, 8vo) 1.50
5. **L'ASSURANCE GRÊLE DANS QUELQUES PAYS ET SES PROBLÈMES** (Insurance against Hail in Some Countries and its Problems). (1911, 110 pages, 8vo) 1.50
6. **AGRICULTURAL CREDIT AND CO-OPERATION IN ITALY: SHORT GUIDE TO RURAL CO-OPERATION IN ITALY** (in English, 35 pages and in Italian, 34 pages, 16mo) 0.25

(e) Other publications.

1. **L'INSTITUT INTERNATIONAL D'AGRICULTURE, SON ORGANISATION, SON ACTIVITÉ, SES RÉSULTATS** (The International Institute of Agriculture, its Organization, Activity, and Results). (1914, 31 pages, in English, French and Italian; illustr.) Frs. 1 —
2. **LOUIS-DOP: LE PRÉSENT ET L'AVENIR DE L'INSTITUT INTERNATIONAL D'AGRICULTURE (CONFÉRENCE)** (Present and Future of the International Institute of Agriculture) (Address). (1912, 60 pages, 16mo). 1 —
3. **SANTIAGO ALDONATE: EL INSTITUTO INTERNACIONAL DE AGRICULTURA Y SU IMPORTANCIA PARA LA AMÉRICA LATINA, EN ESPECIAL PARA CHILE (CONFERENCIA)** (The International Institute of Agriculture and its Importance for Latin America, especially for Chile). (1913, 30 pages, 16mo) (Address). 1 —

II. Publications not for Sale.

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INTERNATIONAL INSTITUTE OF AGRICULTURE
BUREAU OF ECONOMIC AND SOCIAL INTELLIGENCE

INTERNATIONAL REVIEW
OF AGRICULTURAL ECONOMICS

(MONTHLY BULLETIN OF ECONOMIC
AND SOCIAL INTELLIGENCE)

VOLUME LXXXI.
8TH. YEAR: NUMBER 9
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Part I: Co-operation and Association

HOLLAND.

DUTCH MARKET-GARDENING AND ITS ORGANIZATION.

by H. M. R. LEOPOLD.

OFFICIAL SOURCES :

- R. P. BONTHUIS : *Fuinbouw (Horticulture)*, pp. 294 to 326 of a publication of the General Direction of agriculture, "De Nederlandsche Landbouw in het tijdvak 1813-1913" (*Dutch Agriculture from 1813 to 1913*), The Hague, van Langenhuysen, 1914.
- DER GARTENBAU IN DEN NEDERLANDEN (*Horticulture in Holland*), published in several languages by the General Direction of Agriculture. *ibid.* 1914.
- JAARCYFERS VOOR HET KONINKRIJK DER NEDERLANDEN (*Statistical Yearbook of the Kingdom of the Netherlands*), 1915 (published 1917) pp. 213 et seq. The Hague, Bros. Belinfante, 1917.
- VERSLAG OVER DEN LANDBOUW IN NEDERLAND OVER 1915 (*Report on Agriculture in Holland in 1915*), in "Verslagen en Mededeelingen van de Directie van den Landbouw" (*Reports and Communications of the Direction of Agriculture*), 1916, No. 3, especially pp. 100-113 The Hague, Van Langenhuysen, 1916.

OTHER SOURCE :

- VAN MARREWIJ (G. J.) (Secretary-treasurer of the "Public Sale of Vegetables" at Loosduinen). *De Loosduinsche Groetenveiling. Haar, oprichting, geschiedenis, werking en nitkomsten* " (*The Public Sale of Vegetables at Loosduinen: its Foundation, History, Action and Results*) 8 illustrations. Naaldwijk, R. van Bergen & Co., 1913.

All the conditions which favour intensive horticulture are united in Holland. The climate is temperate and very damp; the land marshy and lying almost wholly below the level of the North Sea. Throughout the year there is need for the soil to discharge artificially its surplus of water, and this allows the crops to be kept fresh on the peaty marshes which are naturally very fertile even during long droughts. The innumerable water courses which cross the country in every direction, and in several districts surround each vegetable garden with a navigable canal, enormously facilitate the transport of manures and other material as well as produce.

For several centuries the Dutch have drawn profit from these natural advantages and have specialized in market-gardening. Some historical facts prove this. In 1516 the Danish King, Christian II, invited the inhabitants of the Waterland near Amsterdam to colonize the island of Amager

near Copenhagen, which thereafter became the vegetable garden of the latter town. Hume tells in his history of England that Queen Katherine of Aragon caused a special messenger to bring Dutch salad to England for the royal table. In the sixteenth century Dutch emigrants introduced horticulture to Norwich and the island of Guernsey.

Materials for a detailed history of horticulture in Holland are lacking, but a little book by Mr. Philipp Andreas Nemnich, "*Original Beitrage zur eigentlichen Kenntniss von Holland*", informs us that as early as 1809 the country specialized in this industry to an advanced degree and exported dried vegetables in considerable quantities. But until 1830 progress was insignificant because Holland suffered from a general depression. It was only after the separation from Belgium that the period began of continuously increasing prosperity by which growers of vegetables, fruit-trees and ornamental plants profited. The deductions to be made from statistics are clear: whereas in 1833 the whole area of market-gardens was 45,884 hectares (1); private gardens, land otherwise grown with vegetables, flowers and bulbs, and orchards and nurseries extended in 1912 over 89,941 hectares (2).

Although from these figures it may be deduced that 2.4 per cent. of the cultivated land was given up in 1912 to commercial production they do not give an idea of the intensity of cultivation. This can be estimated if it be noted that in 1912 the total extent of frames in which vegetables were grown was nearly 477 hectares, that of cucumber and tomato houses more than 430 hectares, that of houses containing frames about 64 hectares, that of vineries 67 hectares, and that of peach-houses 15 hectares. Flowers were grown in frames extending over 20 hectares and houses extending over 34 hectares, while nursery frames and houses covered respectively 4 and 1.7 hectares.

As regards yield this can be deduced from the facts as to the division of property. Three fourths of the horticulturists, almost all of whom have been able to build themselves pretty country houses, have less than three hectares of land each: 13.9 per cent. have from 0.05 to 0.50 hectare; 16.6 per cent. have from 0.50 to 1 hectare; 30.6 per cent. have from 1 to 2 hectares; 16.7 per cent. from 2 to 3 hectares; 13.5 per cent. from 3 to 5 hectares; 6.6 per cent. from 5 to 10 hectares; and 2.1 per cent. more than 10 hectares. The census of occupations taken in 1909 showed that there were 15,488 horticulturist employers of labour and 29,760 workpeople.

Figures as to the total yield and its value would be interesting, but statistics on this point are unfortunately lacking. The economic importance of vegetable and flower-growing can however be estimated from the following figures as to Dutch exportation in 1912.

(1) 1 hectare = 2.5 acres.

(2) The last statistics (1915) give the extent of commercial vegetable gardens as 18,652 hectares, that of private gardens as 32,467, that of orchards as 23,677, that of nurseries as 2,673 that of flower gardens as 538 and that of bulb gardens as 5,319 hectares, giving a total of 83,326 hectares. The decrease in area is doubtless due to the war.

Produce	1912	1912	1912	1915
	Expor- tation	Value	Destination	
	in 1000 kg (1)	in 1000 florins (2)	(principal customers) in 1000 kg	
<i>Fresh Fruits :</i>				
apples	23,000	1,621	{ Germany 21,000 Belgium 1,376 Great Britain 528 Norway 29	61,837 1,700 4,415 10
pears	10,000	588	{ Germany 8,700 Great Britain 1,000 Belgium 75	12,870 3,796 189
table grapes	259	117	{ Germany 146 Great Britain 107	1,589 261
cherries	3,100	248	{ Germany 2,409 Great Britain 700	2,458 1,104
gooseberries	3,000	302	{ Germany 2,800 Great Britain 200	2,960 232
black currants	660	79	{ Great Britain 570 Germany 90	1,049 41
white and red currants	1,000	106	{ Great Britain 600 Germany 400	1,162 1,796
strawberries	3,800	575	{ Germany 3,700	6,915
<i>Fresh vegetables :</i>				
cabbages	32,000	476	{ Germany 27,000 Belgium 3,000 Great Britain 2,000	50,788 15,026 1,373
cauliflowers	17,000	337	{ Germany 15,000 Great Britain 1,000 Belgium 700	15,638 1,181 52
onions	41,000	1,017	{ Great Britain 25,000 Germany 10,000 Belgium 4,500	11,381 62,442 3,909
cucumbers	47,000	1,420	{ Germany 43,000 Great Britain 4,000	52,516 3,883
other fresh vegetables	73,000	3,600	{ Germany 51,000 Belgium 12,000 Great Britain 9,000	106,281 6,346 8,444
Dry vegetables	480	411	{ Germany 295 Belgium 112	— —
Vegetables preserved in salt or vinegar	6,250	4,186	{ Great Britain 4,800 America 600 Germany 400	— — —
Vegetables preserved in boxes	3,500	1,214	{ Dutch East Indies 2,600 Great Britain 400 Belgium 125	— — —

(1) 1 kilogramme = 2.2 lbs. (2) 1 florin = 1.66s at par. (3) The statistics of 1915 lump fresh and dry vegetables.

Produce	1911	1912	1912	1915
	Exportation in 1000 kg	Value in 1000 florins	Destination (principal customers) in 1000 kg	
<i>Living Plants:</i>				and dry
trees and shrubs	12,500	3,200	Germany 6,500 America 3,000 Great Britain 1,200 Russia 700 Belgium 300	4,223 8,880 2,185 — 33
flowers, leaves, branches	1,140	1,712	Germany 950 Great Britain 86 Belgium 40 Sweden 22 Norway 20	1,104 104 12 37 34
other plants (cuttings and grafts)	1,700	500	Germany 870 Belgium 770	254 33
Flowering bulbs	23,000	13,650	Great Britain 7,400 Germany 5,100 America 3,800 Belgium 2,000 Sweden 1,300 Russia 900	7,980 5,374 8,101 76 2,452 572
Flower and vegetable seeds	2,000	1,030	America 200 Germany 760 Belgium 176 Great Britain 140	— — — —

From these figures it might be deduced that the total value of the export of Dutch horticulture is about 73,000,000 francs, but it should be remembered that this does not include new potatoes and that the larger share of the onions is produced not by horticulturists but by the peasants. To estimate the production the consumption of the six million Dutch people, who are accustomed to eat large quantities of vegetables, must also be borne in mind.

I have given the figures for 1915 as they stand in the last of the sources indicated, but I must warn my readers that they are very abnormal, especially because several buyers have disappeared from the market and exportation has been distributed among the others.

Probably Dutch horticulture was highly specialized at its very origin. The specialization subsists and has the advantage that it produces every where generations of good workmen and well informed employers. It has moreover facilitated the birth and development of the organization which is the pride of the market-gardeners, and has made them well-to-do and so powerful that in the present very difficult circumstances they have

been able to save their industry not only from bankruptcy but also from subjection to the State.

Rarely has such strong co-operation developed in so short a time. The market-gardeners came to understand the usefulness of association only after 1880. Towards the middle of the nineteenth century their trade was still so despised that no one in a good position would allow his son to study and practise horticulture. The market gardeners — it is Mr. Marrewijk who thus describes the position of his colleagues in the village of Loosduinen thirty years ago — lived in discoloured and dilapidated cottages and depended exclusively on the local market at the Hague, where in the mornings they sent their wives and children to hawk a small quantity of vegetables from house to house, to haggle over prices with the servants or housewives who often delayed their purchases until the afternoon in order to buy more cheaply what remained of this merchandise, so subject to deterioration that it could not be carried away. Competition among producers was very severe and would have ruined them all if the nascent export trade in potatoes, especially with Great Britain, had not brought them in a little money and caused the price of vegetables, which were rendered a little less plentiful, to rise. Although the British soon began to grow their own potatoes the relations which had been established were not broken: the inhabitants of Loosduinen began to grow green cucumbers for their customers overseas, and Germany took its place beside Great Britain as a good purchaser of produce. The position was not however satisfactory because competition was unmodified, and the market-gardeners were their own enemies until they recognized that only organization could save them.

This much developed organization — in 1913 there were in Holland 294 associations of horticulturists of which 109 belonged to a "central council" the "Nederlandsche Tuinbouwraad" — has not only important means of propaganda — State-aided schools, frequent exhibitions, a considerable number of periodicals — but also a particular institution, the *sales*.

The "sales" brought about a revolution first in the vegetable and then in the fruit trade, for they were enormously favourable to the development and specialization of cultivation. The first sales association was founded at Broek op Langendijk, a centre for cabbage growing in North Holland — but until 1897 there were only fifteen of these modern institutions although; now their number far surpasses a hundred. All the important producing districts now have one or more of these "sales". Instead of awaiting patiently the visit of a wholesale buyer and selling him produce at a price fixed rather by the buyer than the producer, or transporting produce by boat or cart to the town and spending the best hours of the day in bargaining with customers, a market gardener who is the associate of a "sale" causes his goods to be carried to a central point where numerous wholesale buyers bid for them at the highest prices. The grower is almost certain of securing the maximum price without leaving his garden.

The frauds which used to be very frequent and injurious to the reputation of Dutch produce on foreign markets are energetically combatted by

the "sales". Cultivation is more and more specialized to meet the demands of the export trade which asks for large quantities of one kind of produce.

Some figures as to the "sale" of Loosduinen may give an idea of the evolution of these institutions, which are provided with entirely modern technical plant and conduct sales by a method which avoids all possibility of controversy.

This "sale" was founded on 10 April 1900. Its first season saw 164 sales, involving 213,226 florins' worth of vegetables and 25,191.55 florins for market rights, or 238,471.55 florins in all. In 1901 an increased number of members brought hardly any increase otherwise: the value of the vegetables was 239,539.01 florins, minus 29,618 florins for those withdrawn, and market rights amounted to 29,618 florins, giving a total of 274,850.76 florins. The decision was then taken to oblige the members to take part in the sale and forbid them to do business themselves with individuals. All did not obey this behest; but 1902 by 182 sales yielded 408,682.4 + 2,647.48 + 44,408.44 florins = 455,738.33 florins. In 1903 the bad weather caused a slight fall, but 1904 was a good year which gave a total of 563,056.83 florins. The installation of heated houses caused the total to rise in 1905 to 705,294.84 florins and in 1906 to 836,654.11 florins. In 1907 a new site for sales was established and the result was that sales brought in 1,054,227.98 florins. The increase in 1908 to 1,064,671.65 florins was slight because harvests were good everywhere, the institution of sales was popularized, and competition was therefore strengthened. The number of buyers was moreover less and the market consequently narrowed. The directors of the sale therefore began to contemplate a general association of all the sales and a large foreign propaganda. The following years — 1909 to 1912 — showed only the slightest progress, and this, according to Mr. Marrewijk, indicates a glut of the Dutch market and the absolute necessity of entering into relations with foreign consumers.

Energetic growers would certainly have found the road to bring them slowly but surely to the goal of their organization if the extraordinary circumstances of the European war had not precipitated events. Direct relations with all consumers beyond the sea and the eastern and southern frontiers were created by the governments themselves; a union of all the "sales" has been fully formed. The return of normal conditions will find Dutch market-gardeners more united and stronger than ever, and largely, with the exception of growers of flowers and ornamental plants, much richer than they used to be.

RUSSIA.

THE EGG TRADE AND CO-OPERATION IN RUSSIA.

SOURCES :

- МАРАДУДИН: Къ вопросу о сбыты яицъ (*The Question of the Sale of Eggs*), in « Вѣстникъ Мелкаго Кредита » (*The Messenger of Small Credit*), No 19, Petrograd, 1912.
- DONZOV: Устройство яичныхъ артелей и сбытъ яицъ (*The Organization of Co-operative Societies and the Sale of Eggs*) in « Вѣстникъ Мелкаго Кредита » No 23, Petrograd, 1916.
- КУЛЮНУЈ: Практическіе шаги по осуществленію кооперативнаго сбыта яицъ (*The Practical Results of the Work for the Co-operative Trade in Eggs*) in « Вѣстникъ Мелкаго Кредита », No 15, Petrograd, 1914.
- Подготовка кооперативнаго сбыта яицъ (*Preparation for the Co-operative Sale of Eggs*) in « Кооперативная Жизнь » (*Co-operative Life*) Nos. 5, 6 and 7, Moscow, 1914.
- G. J.: The Egg Trade and Co-operation in "The Russian Co-operator" No. 2, London, 1917.

The egg trade occupies an important place on the international market, and one of the leading places in this trade, among countries exporting eggs, belongs to Russia. Great Britain annually receives enormous quantities of eggs from abroad, and is therefore first in importance among the importing countries.

Russia's exportation of eggs began comparatively recently. In 1883 she exported only 128,329,000 eggs. In 1904 such number had risen to 954,000,000 and in 1914 to 3,395,859,000 eggs. The quantity she exported increased by 65 per cent. between 1902 and 1912.

Until 1906 she sent her eggs especially to Germany, the country which then was the chief importer of eggs. But since 1907 Germany has in this respect been superseded by Great Britain.

If we examine the data regarding this exportation we see that in 1909 out of a total number of 2,844,737,000 exported eggs 1,051,468,000 or 36.9 per cent. were sent to Great Britain; 794,987,000 or 27.9 per cent. to Germany; 697,635,000 or 24.6 per cent. to Austria-Hungary; 115,257,000 or 4.1 per cent. to Holland; and 185,390,000 or 6.5 per cent. to other countries, including Belgium, Denmark, France, Switzerland and Finland.

Russia lost her first place in the German egg market owing to the opening of an economic struggle with Austria-Hungary, and regained it only in 1913.

Before the war Russia was supplying two of the largest egg markets in Europe, the British and the German, and was also sending eggs to France, Austria, Hungary, Belgium, Denmark and Holland.

Although these latter countries themselves export eggs they also import them for home consumption. This is because their own eggs fetch higher prices in the market than the Russian eggs, which therefore they consume while they sell abroad those they produce.

The following table gives an exact idea of Russia's export trade in eggs in the twelve years from 1901 to 1912.

TABLE I. — *Eggs exported by Russia to the Chief Countries of Europe from 1901 to 1913.*

Year	Austria	Belgium	Great Britain	Germany	Holland	Denmark	Total
In thousands of eggs.							
1901 . .	447,033	53,655	520,506	808,583	56,525	30,973	1,996,977
1902 . .	544,699	80,649	607,430	863,185	27,981	33,527	2,228,948
1903 . .	594,441	83,468	811,009	1,052,999	51,349	46,386	2,775,051
1904 . .	605,357	92,606	854,835	990,984	49,930	58,804	2,752,762
1905 . .	730,607	101,288	940,437	1,005,285	60,019	75,264	2,993,552
1906 . .	674,765	71,738	873,015	978,644	87,466	56,847	2,883,171
1907 . .	541,914	48,217	867,481	850,083	60,239	44,831	2,607,625
1908 . .	704,110	61,375	894,319	745,381	76,366	24,642	2,588,518
1909 . .	697,635	83,189	1,051,468	894,987	115,257	36,348	2,844,737
1910 . .	667,307	96,787	1,086,336	866,081	174,026	35,884	2,998,164
1911 . .	793,228	113,446	1,308,181	1,118,772	192,818	78,259	3,682,049
1912 . .	868,655	90,775	1,138,241	1,000,783	174,213	43,331	3,395,859

As appears from this table the egg trade is a large source of income to Russia. The figures regarding exportation to Holland and Denmark show however that this income might be much larger if the conditions of poultry-farming were better organized and if more care were devoted to the trade.

The prices paid abroad of recent years for Russian eggs have varied from 20.42 roubles (1) to 23.43 roubles for a thousand. Great Britain has provided the best market, paying from 23.42 roubles to 23.43 roubles a thousand.

If we compare these prices with those paid in Great Britain to Danish merchants we find that while the best Russian eggs fetched 23 roubles a thousand, inferior Danish eggs fetched at the same time the equivalent of

(1) 1 rouble = about 25 $1\frac{1}{4}$ d. at par.

40 roubles a thousand. A comparison with the prices of French eggs gives similar results: in 1909 Russian eggs cost 31 roubles and French eggs 40 roubles a thousand.

Poultry-farming is treated in Russia as a separate branch of the management of a farm only in rare and exceptional cases.

The great mass of exported eggs are small. Most of the Russian farmers who go in for poultry are small peasant landowners who usually possess only some dozens of hens, pay little attention to them and allow them to breed as chance dictates. Therefore both Russian hens and Russian eggs are small.

The Russian peasant neither selects fowls for his poultry-yard nor takes care of his eggs. The eggs are long on the road and their freshness suffers. Moreover the methods of trading in eggs are defective. It is impossible to secure that the Russian dealers despatch them as promptly nor that the railways transport them as rapidly as is required. There is no organization adapted to this kind of trade, of which the material belongs to the category of perishable merchandise.

Only recently, after years of this export trade, attention has been directed to it. There has been a desire to provide for the collection, classification and packing of eggs. Refrigerators have been constructed with important results.

Russian eggs now arrive in better condition. Their price has risen since 1912, and it is to be hoped that the Russian peasant will, as a report of the Popular Bank of Moscow states, develop his poultry-farming with the help of co-operative societies and himself become busy over the egg trade. Until recently all this trade was in the hands of small middlemen, who collected the eggs in the villages and gave for them such low prices that the producers are estimated to have lost as much as 27,000,000 roubles a year.

The immense area of Russia, the great distance at which she is situated from foreign markets, the lack of organized centres which would bring the small farmer into direct relation with the foreign market — all these are obstacles to the solution of the problem. The zemstvos and the exporting department have worked hard to create a co-operative trade in eggs. Numerous and interesting attempts in this direction might be cited. Then the Popular Bank of Moscow intervened, its director making a series of interesting investigations in the matter.

Unfortunately all this work did not lead to the formation of a single co-operative society for trading in eggs, and it was found equally impossible to form an agency which could act as middleman between the societies and the market to be supplied.

Occasionally but without method a series of societies was formed, but these could not trade on a large scale so as really to secure profits.

The first steps towards building up this co-operative trade on a large scale were taken before the war, in 1914, by the Popular Bank of Moscow which was willing to undertake the management of a central organization.

With this object this bank concluded on 22 June 1914 a special agree-

ment with the *Union* stock company of London which was founded to trade in eggs.

In accordance with this agreement work is planned to be executed in common as follows :

- 1) The *Union* is the sole representative of the Popular Bank of Moscow on foreign egg markets. The *Union* was formed with the support of the *Union of Siberian Dairies* and trades in butter, poultry and eggs. It has already a large body of customers ready to buy Russian eggs. It conducts all its trade on commission exclusively. The representative of the Popular Bank of Moscow has the right to control its activity.

- 2) The Popular Bank of Moscow is the sole representative of the *Union* in Russia where the trade in eggs is concerned.

- 3) The Popular Bank supplies credit to co-operative societies and grants advances on merchandise sent abroad.

- 4) The Popular Bank is a centre for all the enterprise as to the foreign trade.

- 5) The bank is only the commission agent of the co-operative societies, who thus support the total risks of transactions.

At the same time there has been some initiative in the direction of forming co-operative unions for trading in eggs.

The first organization of this kind was formed in the province of Pensa in which three co-operative societies united, the first of them having 54 members of whom 45 were purchasers, while the two others were made up of peasants busy over the development of poultry farming. The first society was to be a centre for the work to be accomplished and its installation was fitted to this purpose. Each society also had an establishment for the sorting and packing of the eggs and was responsible for their quality.

The peasants' co-operative societies were to collect eggs from their members and classify them. When they had received a sufficient number to form a waggon-load this was to be sent immediately by the *Union of Siberian Dairies* to be sold on the market by a wholesale merchant, who was obliged periodically to supply the bulletin of the market prices of the various kinds of eggs.

On eggs collected outside the co-operative society 90 per cent. of the market price was advanced, but as much as 100 per cent. was advanced on members' eggs.

In fact the endeavour was to form an organization connecting buyers and producers, who should do business on an equality.

But this enterprise did not develop largely and did not meet with all the success expected for it.

A second enterprise was set on foot in the district of Eletjk in the province of Orel where an organization of the Danish type was formed, the union of the artels for selling eggs.

The scheme remained almost a dead letter. The Russian woman was still too much of a stranger to this form of co-operation ; the society had few members and could not struggle with the large dealers who disposed of capital.

Now that the prices of agricultural products have risen to giddy heights new efforts have been made to attain to the organization of the co-operative sale of eggs.

The department of agricultural economy has drawn up model by-laws for a co-operative society for the sale of eggs.

According to these such a co-operative society organizes itself to sell in the best conditions its members' eggs. It can organize for depositories, warehouses and refrigerating plant. Every farmer who keeps poultry may join the society so long as he does not himself undertake the sale of eggs. No member may sell eggs outside the society to which he must deliver all the eggs his poultry supply. To this rule the by-laws make only one exception in favour of the sale of valuable sittings of a breed not common in the district in which the co-operative society works. Such sale needs however the special authorization of the society. Every member of the society has his mark which must be placed on his eggs. The liability of members is limited. They are liable in their possessions but in the measure determined by the by-laws. The minimum membership of a society is eight.

These co-operative societies enter into direct relations with the Popular Bank of Moscow. In despatching merchandise as the bank indicates they should inform the bank as to current market prices. After the sale the Union and the Popular Bank send to a co-operative society a detailed account together with the sum produced by the sale, the amount advanced to the society having been deducted.

This organization gives promise of a large development which will bring it, after the war, the success attained by the similar co-operative organizations for the sale of butter, flax and tobacco.

MISCELLANEOUS INFORMATION RELATING TO CO-OPERATION AND ASSOCIATION IN VARIOUS COUNTRIES.

BRITISH INDIA.

THE ACTIVITY OF THE CO-OPERATIVE SOCIETIES IN 1915-1916. — Report on the Working of the Co operative Societies in Assam for the Year ending on the 31st of March 1916. — Assam Secretariat Printing Office, Shillong, 1916.

The comparative general situations of co-operative societies in Assam on 31 March 1916 and 1915 appears from the following table :

	Central Banks	Unions	Agricultural Societies	Non- agricultural Societies	Total
<i>Societies :</i>					
1914-1915	7	3	271	20	301
1915-1916	10	2	285	18	315
<i>Members :</i>					
1914-1915	449	54	13,698	1,821	16,022
1915-1916	503	48	15,792	1,638	17,981
<i>Working capital :</i>					
	Rs.	Rs.	Rs.	Rs.	Rs.
1914-1915	1,96,427	2,769	3,47,241	2,61,078	8,07,515
1915-1916	3,29,275	3,95,185	1,71,777	8,96,237

All the agricultural societies had limited liability. All the societies with few exceptions showed a profit on the year's working, but their progress was seriously checked by the floods and the indifferent crops.

Central Banks. — These banks have been grouped anew and therefore the figures they submit for 1915-1916 cannot be compared with those of the previous year. The paid-up share capital of the banks now classed as central was Rs. 49,755 (1) in 1915-1916. Their profits amounted to Rs. 12,554. These banks issued loans to agricultural societies at rates of interest varying from 7 ½ per cent. to 12 ½ per cent. per annum. The total amount thus issued during the year was Rs. 44,145 as against Rs. 57,045 in the previous year. It is the exception to find that loans are repaid within the period fixed.

(1) 1 rupee = 1s. 4d.

Supervising Unions. — The number of supervising unions did not alter during the year under review. Two of them did useful work; the third had been classed as a central bank.

Agricultural Societies. — Altogether twenty-seven new agricultural societies were registered in 1915-1916. Members' deposits rose from Rs. 79,962 to Rs. 83,794, the rate of interest on deposits remaining $6\frac{1}{4}$ per cent. as in the preceding year. Loans to the value of Rs. 1,46,801 were issued to members, the average loan being Rs. 9-4. The rate of interest on loans varied from $12\frac{1}{2}$ per cent. to $18\frac{3}{4}$ per cent. per annum. The majority of loans were made for a period of more than a year.

All the profits of agricultural societies, amounting to Rs. 22,935, were carried to the reserve funds.

Non-Agricultural Societies. — No non-agricultural society was registered in 1915-1916. One society of this kind was transferred to the class of central banks: and in consequence the total capital, including reserve funds, decreased from Rs. 2,58,307 to Rs. 1,74,077, the deposits of members from Rs. 97,982 to Rs. 66,671, those of non-members from Rs. 73,573 to Rs. 43,486, and the amount of loans outstanding with other societies from Rs. 72,358 to Rs. 30,093. The rate of interest on deposits was the same as in 1914-1915, namely 4 to $4\frac{1}{2}$ per cent. on current deposits and 5 to 9 per cent. on fixed deposits.

The total net profits of the non-agricultural societies amounted to Rs. 7,622, and they declared dividends varying from $6\frac{1}{4}$ to $12\frac{1}{2}$ per cent. On the whole all of them had a very satisfactory year.

Reserve Funds. — Partly owing to the transference of one non-agricultural society to the class of the central banks the reserve funds of the latter increased largely, from Rs. 7,348 to Rs. 14,019, while those of the non-agricultural societies fell from Rs. 15,706 to Rs. 14,496. The reserve funds of the agricultural societies made a substantial advance from Rs. 49,529 to Rs. 63,255.

In spite of the continuance of the war and the prevalence of distress in most parts of the country very little difficulty was experienced in financing rural societies during the year under review. No government loan was issued to central or non-agricultural banks. Loans from central banks and non-agricultural societies increased from Rs. 1,74,833 to Rs. 2,10,376. Deposits of individuals in central banks and non-agricultural societies increased from Rs. 3,29,081 to Rs. 3,58,592. Deposits from individuals — members and non-members — in agricultural societies increased from Rs. 95,434 to Rs. 99,299.

CANADA.

I. CO-OPERATIVE TRADING IN SASKATCHEWAN. — *The Public Service Monthly*, published by the Department of Agriculture, Saskatchewan, Vol. V, No. 11, p. 209, Regina, June 1917.

The details in the following table show clearly and concisely the satisfactory development of the co-operative movement in Saskatchewan, from

year to year and ever since its inauguration. More than 350 co-operative trading associations have been registered under the Agricultural Co-operative Associations' Act of Saskatchewan since it was passed, that is since December 1913. This implies that on an average two associations a week have been organized during the last three years -- a remarkable record. It is interesting to notice that the great majority of the associations do a most satisfactory business.

	1914	1915	1916
Associations which supplied a report	102	173	309
Number of shareholders	2,850	5,537	9,444
Paid-up capital	\$ 13,494.20	\$ 39,421.49	\$ 92,940.27
Assets	\$ 37,337.53	\$ 105,322.37	\$ 295,012.40
Liabilities including paid-up capital	\$ 20,717.33	\$ 82,956.57	\$ 232,938.81
Number of associations handling supplies.	70	138	308
Value of supplies handled	\$ 239,320.42	\$ 805,456.88	\$ 1,784,545.85
Number of associations marketing live stock.	9	10	33
Number of cars handled	30	\$ 140	\$ 241
Value of live stock handled . . .	\$ 42,034.22	150,512.76	\$ 323,171.25
Value of other farm produce handled	No report	\$ 8,923.03	\$ 15,115.80
Total turnover.	\$ 281,354.64	\$ 964,892.67	\$ 2,122,832.90
Net profits	No report	\$ 19,102.27	\$ 54,076.82

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2. CO-OPERATIVE STOCK MARKETING IN ALBERTA. — *The Grain Growers' Guide*, Winnipeg, 11 July 1917.

In the spring of 1917 the Manville district association of the United Farmers of Alberta decided, owing to the very unsatisfactory prices locally received for live stock, to form a marketing association. Each local union appointed one of its members to attend the meetings of this association as its representative.

These directors so appointed and the executive committee, president and secretary of the district association have the responsibility of the marketing association. For its working a manager, grader and seller and a secretary were appointed.

The method of dealing with the stock is as follows: Members give the secretary lists of the stock they wish to consign and he, when the animals on these lists are sufficient to form a consignment, appoints a day for the delivery of the stock and notifies the manager accordingly. It is a rule that the loads are made up in the order of the lists. On the appointed day the manager weighs, grades and generally looks after the stock, and also decides, according to information which has been received, which is the best

market. On the day on which the stock is consigned members who are in need of cash bring the slips showing the weight, grade, etc., of their animals to the secretary, who advances them as much as is compatible with the retention of a safe working margin. When the secretary has received the returns of sales he makes out the sum of the total expenses, divides this by the total weight, and then finds out the expenses for 100 lbs. Each consigner then receives a statement showing the amount received for his stock, minus the costs calculated at the rate per 100 lbs. and any advances he may have received. A cheque for the balance is handed or posted to him. The costs and returns of every consignment thus balance, and every consigner receives the full net profits realized by his stock, including such as formerly went to the middleman.

Altogether some thousands of dollars have been saved, and prices have been kept up as far as the quotations of the middlemen have been concerned.

ITALY.

- 1 THE DELIBERATIONS AND VOTES OF THE THREE COMMISSIONS FOR CO-OPERATIVE PRODUCTION AND LABOUR, CO-OPERATIVE CONSUMPTION AND AGRICULTURAL CO-OPERATION, NOMINATED BY THE CONGRESS OF ITALIAN CO-OPERATIVE SOCIETIES IN DECEMBER 1916. — *La Cooperazione Italiana*, organ of the *Lega Nazionale delle Cooperative*, No. 1240, Milan, 27 April 1917.

At the Congress of Italian Co-operative Societies on 17 and 18 December 1916 (1) three commissions of experts were nominated to investigate the most urgent problems connected with co-operative production and labour, co-operative consumption and agricultural co-operation. In a congress of these three commissions recently held at Milan some important decisions were taken, among others, as to the "interior reorganization of co-operative organization". The necessity of undertaking this reorganization immediately was recognized, of grouping, that is, in accordance with their respective commercial and industrial activity, the various forms of co-operative societies existing in Italy, in a manner which will increase their economic and social importance; and the *Lega nazionale* was invited to distribute the federated societies in branches, according to whether they are concerned with a) consumption, b) production and labour, or c) agriculture. Until these three distinct national federations should be constituted the commissions themselves undertook to assist and guide the three groups of societies, in the matter of their business and by advising them as to their technique, administration and book-keeping, each of the commissions agreeing to work, in agreement with the league's directing council, as a central committee for its respective federation. It was determined that the commissions should devote themselves especially: a) to giving increasing unity of action to the co-operative movement and favouring the fusion of local societies in federations and consortia by connecting each with its respective national federal group; b) to defending the rights of co-operative societies and

(1) See our issue for March 1917, page 20.

procuring their sanction by strong legislative measures; c) to helping the efforts of co-operative societies where credit is concerned whether in relation to works put up for tender, requisitions of provisions, the cultivation of lands, collective farms or the foundation of establishments, works and industries, etc.; d) to organize offices, departments for collective buying, and means of production and distribution, with the object of giving to co-operative business, which already deals with nearly a thousand million liras (1), a single basis, and a financial strength which will allow it to exercise a beneficent influence on the Italian markets.

The resolutions concerned with the development of thrift, co-operation and national economy were no less important. They can be divided into three groups in accordance with their aims. In the matter of social legislation they asked: 1) that general insurance against sickness, disablement, maternity and the accidents of all kinds of labour should be obligatory; 2) that there should be fit laws to regulate labour and labour contracts; 3) that trades should be taught with the help of an ample supply of technical means; 4) that there should be labour universities for the higher education of the technical managers and the directors, inspectors and secretaries of industries, businesses and co-operative societies.

In relation to co-operation directly they asked further: a) that the legislation as to co-operative societies should be revised and rendered more precise, less ambiguous, and more accordant with the development of co-operation in its various branches of consumption, agriculture, production, labour and building; b) that the law as to the State's accounts should be revised, particularly where the jurisdictional aspect of tenders, auctions and private contracts are concerned, so that the execution of public works should be directly confided to the *labourers' co-operative organizations*, controlled by the State; c) that there should be legislation for the constitution of agricultural domains, colonies and collective farms, for the cession of the lands of public administrations to co-operative societies, and for a large provision of agricultural credit for all Italy.

Finally after the war: 1) a broad and courageous policy should be followed as regards public works, improvements, mountain basins, hydraulic installations, canalization, ports, railways and roads; 2) national and provincial commissions should be formed for the immediate investigation of conditions in the various districts of Italy and the elaboration of a vast programme for the increase of production, etc.

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2. CO-OPERATIVE SOCIETIES LEGALLY CONSTITUTED ON 31 DECEMBER 1915
— *Annuario statistico italiano* (Italian Statistical Yearbook), 2nd Series, Vol. V, 1915.
Direzione generale della statistica e del lavoro, Roma, 1916.

We borrow from the Italian Statistical Yearbook, recently published by the General Direction of Statistics and Labour, the following data as

(1) 1 lira = about 9 $\frac{1}{4}$ d. at par

to the co-operative societies legally constituted on 31 December 1915, excluding those of which the chief aim is to afford credit. On the date named there were 8,251 societies in Italy as against 7,429 on 30 June 1914. They were distributed in categories as follows:

I. <i>Co-operative consumption</i>		2,312
II. <i>Co-operative insurance</i>		162
III. <i>Co-operative agriculture and oenology</i>		
1) Special agricultural industries and cultures . .	1,058	
2) Viticulture and oenology	132	
3) Silkworm breeding, sericulture, apiculture and derivatives	12	
4) Dairies and cheesemaking	169	
		<hr/> 1,371
IV. <i>Co-operative food-producing industries</i>		
1) Bakeries, mills, paste factories	89	
2) Butcheries and various food-producing industries	50	
		<hr/> 139
V. <i>Co-operative fisheries</i>		122
		<hr/> 4,106
VI. <i>Co-operative industrial production:</i>		
1) Clothing, textile and derivative industries . .	110	
2) Wood and leatherwork	155	
3) Mechanical and metallurgical industries . . .	177	
4) Chemical and pharmaceutical industries . . .	56	
5) Decorative arts and ornamental products . .	117	
6) Electrical work	82	
7) Polygraphic and derivative industries	124	
8) Works for objects of hygiene	38	
9) Building, ceramic and glassblowing industries .	40	
10) Various industries	19	
		<hr/> 918
VII. <i>Co-operative building</i>		704
VIII. <i>Co-operative labour:</i>		
1) Masons, stonecutters, cementers	939	
2) Journeymen, navvies, quarrymen	734	
3) Drivers, carters	201	
4) Dockworkers, porters	211	
5) Mixed	90	
		<hr/> 2,175
IX. <i>Various co-operation</i>		348
		<hr/> 8,251
Total		

The geographical distribution of these co-operative societies is as follows:

Emilia	1860	Campania	298
Lombardy	1484	Marches	266
Tuscany	851	Umbria	131
Venetia	731	Calabria	118
Piedmont	650	Abruzzi	79
Latium	520	Sardinia	57
Sicily	432	Basilicata	37
Liguria	407	Tripoli	2
Apulia	327	Erythrea	1

The co-operative societies of agriculture and oenology numbered 1242 on 30 June 1914, which number had risen, as has been seen, to 1371 on 31 December 1915. In these eighteen months there was therefore an increase of 129 societies.

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3. THE POSITION OF LOCAL FEDERATIONS OF CATHOLIC RURAL FUNDS ON 31 DECEMBER 1915. — *Cooperazione Popolare*, the organ of the Catholic rural funds and co-operative and mutual societies, Nos. 7 and 8, Parma, 8 April 1917.

In our issue for November 1916 (page 40) we announced that general statistics of Catholic rural funds were being drawn up by the Italian Federation of Catholic Rural Funds of Bologna. We borrow from the data already collected by this federation the following table, which resumes the position of local federations of Catholic rural funds adhering to the federation on 31 December 1915:

Local federations	Members	Reserve subscriptions	Deposits	Loans
		liras	liras	liras
Amatrice	2,360	56,533.15	959,348.88	806,286.52
Arezzo	1,140	12,608.11	594,191.40	452,705.56
Bari	1,170	31,799.59	239,151.88	177,030.94
Benevento	78	46,510.13	1,018,887.93	831,150.71
Bergamo	8,973	251,376.14	8,548,136.44	4,970,451.28
Bologna	7,544	147,348.15	3,626,841.02	1,768,312.44
Brescia	1,974	106,756.66	2,602,878.28	1,687,841.99
Cosenza	3,500	100,897.21	4,677,638.49	3,216,074.04
Fano	1,366	6,839.22	324,562.62	230,575.45
Faenza	5,677	123,795.94	3,322,799.35	1,797,757.65
Ferrari	3,841	78,689.04	993,655.50	917,516.15
Florence	4,198	43,362.08	1,140,697.67	831,358.25
Forlì	3,114	49,061.63	888,674.39	762,809.17
Isola della Scala	—	—	—	—
Lodi	1,580	13,008.19	804,120.52	552,323.59
Mazzara del Vallo	2,129	69,648.90	498,973.74	587,442.75
Milan	2,024	49,049.40	1,687,650.05	469,283.01
Mondovì	2,183	29,842.23	1,158,113.38	912,291.17
Palermo	5,246	226,792.35	3,256,247.45	3,857,601.37
Parma	3,732	186,327.80	3,281,679.27	2,918,127.95
Pistoia	4,280	85,704.43	1,644,153.86	1,887,125.09
Reggio di Calabria	380	7,913.40	98,154.83	94,620.56
Reggio d'Emilia	2,420	95,086.40	2,804,015.68	1,631,667.61
Rome	10,155	301,834.47	2,714,688.48	2,311,840.18
Rovigo	3,794	104,603.98	1,676,166.70	1,534,698.27
Salerno	824	217,011.80	316,103.12	193,300.15
Turin	10,771	385,303.41	11,405,519.59	8,242,261.64
Tortona	400	10,121.27	298,193.96	211,868.20
Treviso	5,925	125,409.66	2,877,173.20	2,347,121.60
Total	101,078	2,952,334.94	65,458,420.77	46,201,452.29

To-day there are about 2,000 Catholic rural funds in Italy, as appears from the list which this federation published in 1916. Out of this number more than 1,000 are affiliated to the provincial federations already mentioned. The latter have also become more numerous, the diocesan federations of Asti, Udine, Senigallia etc. having been constituted recently.

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4. THE DEVELOPMENT OF THE CO-OPERATIVE MOVEMENT IN THE ABRUZZI.
— *La Cooperazione italiana*, No. 1238, Milan, 6 April 1917.

We borrow from a report, presented to the last Congress of the Agricultural Labourers of the Abruzzi by a member of the council of the National League of Co-operative Societies, the following data as to the position of the co-operative movement in the Abruzzi at the end of 1916. At this date there were altogether in this district 113 co-operative societies, distributed as follows: 13 for consumption and agriculture; 6 for labour; 6 for credit, including rural funds; 7 co-operative agricultural consortia; 52 societies for the mutual insurance of live stock. They included 18,000 members, had a capital of 735,000 liras and a turnover of about 10,000,000 liras, neither of the latter figures covering the societies for the mutual insurance of live stock. So much as to the co-operative movement in general. As regards agricultural co-operation in particular it is represented by agricultural co-operative societies, co-operative credit societies and rural funds, agricultural consortia, and mutual live stock insurance societies.

The agricultural co-operative societies consist of agriculturists and small landowners and aim principally at buying articles useful to agriculture and selling them to their members.

The co-operative credit societies and rural funds have a similar membership and supply their members with the sums needed for the cultivation of their lands. Some of them also practise the collective buying of implements, seeds, manures, fertilizers, and distribute them among their members at cost price.

The co-operative agricultural consortia are open to all persons who are at the head of a farm and buy or sell articles useful to agriculture.

The societies for the mutual insurance of live stock propose to indemnify their members for losses resultant on injuries suffered by their insured animals.

All these societies tend moreover to improve the agricultural industry and raise the moral and intellectual level of their members.

The co-operative credit societies and the rural funds have had the largest development, having 10,300 members, 35,000 liras in capital shares and a turnover of about 9,500,000 liras. Next to them come the co-operative agricultural consortia which have 2,200 members, 82,000 liras in capital shares and a turnover of 230,000 liras; while the cooperative agricultural societies have 1,500 members, 20,000 liras of capital and a turnover of 125,000 liras; and the mutual live stock societies about 2,000 members.

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5. THE "FEDERAZIONE ITALIANA DEI CONSORZI AGRARI" IN 1916. — *L'Italia Rurale*, organ of this federation, 25th year, No. 355, Piacenza, 10 March 1917.

The report of the administrative council of this Italian Federation of Agricultural Consortia of Piacenza shows that in 1916 sales brought in

27,156,957.37 liras as against 19,240,443.16 liras in the preceding year. We should notice that 89,000 quintals (1) of sulphate of copper and about 20,000 quintals of Caffaro paste were provided. Equally important were the importation, for the provisioning of the co-operative factories of superphosphates in Piacenza, Cremona, Novara, Secugnago (Lodi), Bagnolo Mella (Brescia) and Cerea (Verona), of 43,295 tons of phosphorites and 200,000 quintals of British coal, and the importations for the threshing of grain, the compression of forage and ploughing. Agricultural machinery accounts for 2,913,725 liras of the sum arising from sales, that is for 100,000 liras more than in 1915.

We pass over in silence much initiative on the part of the federation for the improvement of agriculture in the country; but note that on 31 December 1916 the federation's capital was 198,075 liras.—made up of 7,923 shares of 25 liras each, subscribed by 1,336 members, and of a reserve of 187,990 liras.

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6. AN OFFICE OF INSPECTION AND AID FOR THE AGRICULTURAL CO-OPERATIVE SOCIETIES AT BOLOGNA. — *La Cooperazione Italiana*, No. 1247, Milan, 8 June 1917

In response to the votes of the Congress of Italian Co-operative Societies on 17-18 December 1916 the *Istituto Nazionale di Credito per la Cooperazione* at Rome founded and inaugurated at Bologna, on the 3rd of last June, an office for the inspection and aid of agricultural co-operative societies. This office proposes to support all forms of agricultural co-operation and in particular *collective farms*. "Assistance will take the form of visits to the farms and businesses and advice as to technical management and the most advantageous reforms. A study of the common action and initiative proper to the various co-operative societies will also be made, a system of exchanging visits being elaborated; reciprocal knowledge will be encouraged; the influence of the best examples disseminated; knowledge and appreciation of the agricultural co-operation of the smallest farmers will be cultivated; by-laws, rules, monographs, etc., will be collected and distributed; and a periodical will be founded in the interests of the agricultural societies to convey to the right quarter the resolutions and desires and a knowledge of the most urgent needs of the national agricultural co-operative movement".

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7. THE FORMATION OF THE "FEDERAZIONE NAZIONALE DELLE UNIONI AGRICOLE". — *Azione Sociale*, No. 9, Faenza, 1 to 15 May, 1917.

On the 25th of last April there was formed at Milan this National Federation of Agricultural Unions, otherwise of the Catholic organizations for the purchase of articles useful to agriculture. It has the form of a limited liability stock company and a capital of 500,000 liras, and aims at promoting and protecting the economic and moral interests of institutions existing

(1) 1 quintal = 220 lbs.

principally for the practice of agriculture. To reach this aim the new federation proposes : a) to assist and represent agricultural federations, rural unions and their adherent agricultural associations, protecting their general interests and promoting their greatest possible progress by demanding such measures of a public order as are most accordant with the importance of their function and the utility of their development ; b) to promote the formation of new agricultural unions, federations and associations ; c) to contribute to increasing as much as possible the co-operative purchase of primary materials, co-operative cultivation, and co-operative marketing, abroad and at home, of products of the soil ; d) to buy and sell and, if required, to produce, in the interests of adherent associations, manures, seeds, machinery and all that can be useful to agriculture ; e) to contribute to procuring funds for adherent institutions ; f) to act, in general, towards the agricultural associations as a centre for information, technical and legal advice and commercial and financial assistance, in the interests of agriculture, agriculturists and the country.

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8. A MEETING OF AGRICULTURAL CO-OPERATIVE SOCIETIES AT BOLOGNA. — *Bollettino dell'Ufficio del Lavoro*, No. 13, Rome, 1 July 1917.

A meeting of agricultural co-operative associations at Bologna on the 3rd of last June passed two noteworthy orders of the day in favour of compulsory insurance against the accidents of agricultural labour, and of agricultural co-operation and modern social legislation. The latter ran as follows : " The agricultural co-operators, met together at Bologna, ask : 1st that the consortia of co-operative labour societies, formed under the law of 1909, be allowed to have ceded to them lands which they will either cede in their turn to their members or themselves farm ; 2nd that farmers or their associations be preferred as lessees, on long leases or otherwise, of lands belonging to public institutions, religious or other ; 3rd that the programme laid down by the Minister Raineri in his speech at Treviso, as to improvements, the commission for equitable letting contracts, accidents affecting harvests and defective harvests, become law as soon as possible ; 4th that credit be provided for improvements, as well as the credit necessary for the eventual purchase of lands which have been improved or have in some way been reserved for their farmers, the acquisition of land by landless agriculturists being thus facilitated ; and 5th that all public works, and reforms and other measures extending the cultivated area, intensifying agriculture and increasing production, be realized as soon as possible, the masses of the labouring population being thus profitably attached to the soil ".

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9. THE POSITION OF THE PROVINCIAL FEDERATIONS OF THE CATHOLIC RURAL FUNDS OF BOLOGNA, FLORENCE AND PISTOIA. — *Cooperazione popolare*, Nos. 12, 13, 14. Parma, June and July 1917.

The position of the *Federazione delle Casse Rurali e Popolari* of the province of Bologna, one of the most important Catholic federations in Italy,

on 31 December 1916, is resumed by the following figures: Number of federated funds 89; number of members 7,628; capital in shares 116,421 liras; deposits 4,927,340 liras; interest paid, interest not due and various liabilities 33,333 liras; loans 1,531,602 liras; deposits in institutions of credit 2,239,453 liras; State and various securities 1,112,571 liras; cash 119,906 liras; merchandise and various assets 141,449 liras; year's income in 1916 195,511 liras; expenditure in that year 117,622 liras.

The position of the federation of Florence in 1916 was as follows: number of federated rural funds 29, number of members 4181, bills in hand 798,716 liras, loans (1 fund) 2,350 liras; deposits in specie in various institutions 568,470 liras; real estate (4 funds) 32,042 liras; securities 85,527 liras; furniture and costs of establishment 5,796 liras; bills and credit pending (2 funds) 4,775 liras; other assets (6 funds) 2,074 liras; capital — members' shares 6,399 liras, reserve fund 35,438 liras; liability deposits 1,527,216 liras; current liability accounts in various establishments (6 funds) 31,275 liras; bills (liability — 3 funds) 8,500 liras; other liabilities 5,752 liras; net profits (24 funds) 6,913 liras; deficit (5 funds) 594 liras.

Finally the position of the federation of Pistoia at the end of 1916 gives the following figures: number of federated funds 40; number of members 4,407; turnover 16,092,860 liras; total loans to members 5,614,595 liras; deposits on 31 December 1915 — 1,644,153 liras; on 30 April 1916 — 1,899,185 liras; on 31 December 1916 — 2,407,101 liras; and on 30 April 1917 — 2,751,652 liras (1).

This federation also represents and administers the federation of the mutual societies for insuring live stock of Pistoia, which includes 25 mutual societies and had in 1916 an average insured capital of more than one and a half million liras.

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10. FORMATION OF NEW SOCIETIES. — *Giornale di Agricoltura della Domenica*, No. 14 Piacenza, 8 April 1917. *L'Agricoltura toscana*, No. 10, Florence, 31 May 1917.

Recently there was formed at Florence the *Associazione cooperativa fra i proprietari e utenti di boschi* (Co-operative Association among Owners and Usufructories of Woods). It consists of owners of woods and those enjoying rights of common in them and aims at the sale in common of the products of forestry. It proposes to open stores where these products may be marketed, to make to members or procure for them advances on the products offered for sale, to instal nurseries for building up woods anew, and to found an office

(1) On the 27th of last June there was legally constituted at Rome the *Federazione Ufficiale delle Casse rurali ed operaie* (Official Federation of Rural and Workmen's Funds), a limited liability co-operative society with unlimited capital. It proposes to act as a central society which will watch over, protect and help, financially and otherwise, its shareholder societies; and also to encourage the formation of new popular societies for credit and co-operation, and to develop, by means of its shareholder societies, the exercise of agricultural credit.

which will give technical advice as to plantations and value the products, and also an office which will give legal advice as to the application of forest laws and rules.

Further the propaganda of the agricultural committee of Casalmaggiore has led to the foundation in the low district of Cremona of some consortia of agriculturists which will conduct in common, by exclusively mechanical methods, corn harvesting and ploughing. Six consortia have been legally constituted. Their sphere of action comprises altogether a cultivated area of more than 15,000 Cremonese perches (1).

These associations proceeded to buy various petrol engines, and the agricultural committee voted a notable financial contribution to the consortia, and has already done what is necessary to unite them for purposes of threshing, in order to obtain the government aid fixed by a recent decree.

Finally a new co-operative dairy has been installed at Casalbuttano in the province of Cremona. It owes its formation to the *Federazione delle latterie cooperative* (Federation of Co-operative Dairies) of this province, acting in agreement with the *Unione nazionale delle latterie sociali* (National Union of Social Dairies).

SWITZERLAND.

THE CO-OPERATIVE CORNMILL AT LEMAN. — *International Co-operative Bulletin*, official organ of the International Co-operative Alliance, 10th year, No. 6, London, June 1917.

The co-operative societies in Western Switzerland have recently acquired possession of a cornmill at Lemman, this being the second such enterprise to be controlled by co-operators.

The initiative in regard to the purchase of the mill was taken by the co-operative societies at Vevey and Lausanne. The mill was put up for sale at a public auction and purchased by the societies for a sum of 73,050 francs, this bid exceeding that of a private mill-owner by 50 francs. In comparison with the real value of the mill the price paid must be considered to be very small. The premises are of much more modest dimensions than those of the cornmill at Zurich but are fitted with modern equipment. Only a year ago the mill was offered for sale at 170,000 francs. It is situated on the banks of Lake Geneva, at a few minutes' walk from the village of Rivaz. It has its own quay, to which in normal times all its corn supplies can be sent directly, by water from Geneva.

The weekly production of the mill is at present from 500 to 600 sacks of flour, but in normal times when a few new machines have been added, it can be brought up to about 900 sacks a week. This would enable the mill to supply the needs of a large number of societies in the west of Switzerland. All necessary preparations are now being made to allow the mill to begin to work as soon as possible.

(1) 1 Cremonese perch = 966.451 sq. yds.

UNITED STATES.

THE CALIFORNIA PEACH GROWERS' ASSOCIATION IN 1916-1917. — From *California Fruit News*, Vol. 55, No. 1511, San Francisco, 23 June 1917.

The business of this important organization brought excellent results in the year which ended on 31 May 1917. The association was able to pay to peach growers an average price of about 6 cents a pound for the fruit they delivered, individual prices varying with size and quality. In addition a dividend of 7 per cent. was paid to shareholders.

The association's balance-sheet shows that on 31 May 1917 assets amounted to \$1,381,676.74. They included fixed assets representing \$149,533.66 (land, buildings, plant and office equipment), balances in banks amounting to \$299,405.44, peaches in stock representing \$231,793.23, and packing material representing \$25,093.92. Total current liabilities amounted to \$421,992.94; and comprised \$334,612.77 due to growers in final settlement, \$112,518.80 being the balance of $\frac{3}{8}$ cent paid for each peach delivered, and total issued stock amounting to \$847,165. The authorized stock amounts to \$1,000,000.

Part II: Insurance and Thrift

ITALY.

THE TUSCAN FEDERATION FOR THE MUTUAL INSURANCE OF LIVE STOCK AND ITS FIRST RESULTS.

SOURCE:

PACI (C.): *La Federazione Toscana delle Mutue Bestiame* (*The Tuscan Federation of Mutual Live Stock Societies*). Report of 1st year of business (1 July 1916 to 30 June 1917) Ufficio Toscano della Mutualità Agraria. Florence, 1917.

§ 1. AIMS AND REGULATION OF THE FEDERATION.

On 16 June 1916 this federation, the *Federazione Toscana delle Mutue Bestiame*, was constituted on the initiative of the *Ufficio Toscano della Mutualità Agraria*, or Tuscan Office of Agricultural Mutuality, with a reinsured capital of 658,063 liras.

The aims of this new institution, which has happily survived its first year of business, are : 1) the union in a single body of local mutual live stock societies, without distinction of faith or politics ; 2) the promotion, by advice and help, of the constitution of new societies for the mutual insurance of live stock and the perfection of their technique and administration ; 3) the stimulation, standardization and co-ordination of the work of local mutual societies in improving zootechnical production and providing prophylactics ; 4) the defence of the mutual federated societies against unjust fiscal taxation ; 5) their partial indemnification for losses due to mortality among live stock.

It must be remembered that in Italy the federative movement in the field of the mutual insurance of live stock is still in its initial stage ; and exemplified only in the *Federazione Provinciale delle Mutue Bestiame di Milano* (Provincial Federation of Mutual Live Stock Societies of Milan) which arose in 1906 owing to the initiative of the *Ufficio Agrario della Società Umanitaria* (Agricultural Office of the Humanitarian Society), and which in 1912 included sixteen federated mutual societies and had a reinsured capital of 170,400 liras.

To the Provincial Federation of Milan, which was dissolved in 1914 for reasons independent of its perfect organization, belongs the credit of having first in Italy faced and solved the difficult problem of the reinsurance of live stock, and of having left a large heritage of data and expe-

rience which are of the highest value to students of this important branch of agricultural mutuality.

An example of simple federative grouping which has no provision for reinsurance or for compensation for risks, is afforded by the *Federazione Provinciale delle Mutue Bestiame* of Aquila, founded a few years ago.

Subsequently at the beginning of the war there were constituted at Genoa, by the efforts of the office of Agricultural Mutuality, the *Federazione Regionale Ligure* (Regional Federation of Liguria), and at Alexandria, on the kindly initiative of the provincial administration, the *Istituto Provinciale Autonomo di Riassicurazione del Bestiame* (Autonomous Provincial Institute for the Reinsurance of Live Stock).

The Tuscan Federation, already mentioned, is thus the sole institution of its kind in Italy, and, as has been said, it has recently completed its first year of business.

In this district there are forty-three mutual live stock societies, of which nineteen charge fixed annual premiums and have regular administrations. The others work on the principle of share-quotas and have more or less rudimentary administrations,

The technical and administrative organization of the federation with which we are concerned is based on the reinsurance of a portion of the risks of single mutual societies, they being enabled to reinsure a quarter or a half of their total risks. In the former case a society pays to the federal fund 25 per cent. of its annual premiums and the federation intervenes when each casualty occurs, paying an indemnification quota equal to 25 per cent. of the loss for which the mutual society becomes liable; in the second case a society pays to the federal fund 45 per cent. of its annual premiums and the federation intervenes to pay 50 per cent. of each loss incurred.

However the various societies, even if they are severally active in almost identical surrounding conditions, are subject to different risks according to the greater or less attention which is paid to hygiene, the prevalence or otherwise of milch-cows among insured animals, the greater or less watchfulness of administrators, etc.; and therefore some are a greater source of expense to the federal fund than others.

At present, in order at least partly to eliminate this inequality which might be an eventual source of discontent among the best organized societies and those which worked most regularly, there is an annual distribution of profits which have eventuated among those societies which are out of pocket through their dealings with the federation. Thus while at the end of every financial year half the profits go to the reserve fund, the other half are restored, according to a determined scale, to the societies which have paid more than they have received.

The amount of the profits accruing to each society is deducted from the premiums due in the next year, so that the federated society pays for reinsurance in that year only the difference between such amount and the normal reinsurance premium.

The federated societies preserve their autonomy, being merely obliged to allow the inspection of their technique and administration.

§ 2. THE RESULTS OF THE FIRST YEAR.

The federation became active on 1 July 1916 when it included seven of the ten mutual societies now federated. The following table shows its relations with each of its federated mutual societies on 30 June 1917:

Headquarters of the Mutual Society	Number of heads of stock insured	Capital insured	Perce- tage re- insured	Capital reinsured	Federal quota	Number of casual- ties	Indem- nities paid
Alta Staggia	422	286,000	50 %	143,000	723.27	3	591.90
Ambra	280	224,475	25 %	56,118	794.42	8	382.28
Canonica Cerreto	327	286,000	25 %	59,000	—	—	—
Modigliana	124	108,000	25 %	27,000	156.68	—	—
Poggibonsi	223	237,300	25 %	59,323	180.50	1	64.12
Porcari	112	76,000	25 %	19,000	424.93	10	412.38
Prato	400	260,000	50 %	130,000	1,203.61	5	838.00
St. Quirico d'Orcia . . .	570	343,000	25 %	85,750	384.58	1	65.00
Tizzana	194	77,000	50 %	38,500	441.63	6	441.09
Valtriano	98	80,740	50 %	40,370	225.00	4	355.88
Total . . .	2,850	1,928,515	—	658,063	4,584.62	38	3,150.65

From these data it appears that from 1 July 1916 to 30 June 1917 indemnities were paid in all for 38 casualties and amounted to 3,150.65 liras. The difference between the reinsurance premiums paid by single societies and the indemnities paid to them was 1383.97 liras.

As regards its finances the federation could not have attained to better results in its first year. The following table shows the amount of loss incurred on every 100 liras of insured value by each federated mutual society.

Name of Mutual Society	Insured Capital	Number of Casualties	Total Loss insured	Percentage of mortality
Alta Staggia	286,000	3	1,182.80	0.41 %
Ambra	224,475	8	1,529.12	0.46 %
Modigliana	286,000	—	—	—
Poggibonsi	287,300	1	256.48	0.20 %
Porcari	76,000	10	1,649.52	2.17 %
Prato	260,000	5	1,676.00	0.72 %
St. Quirico d'Orcia	643,000	1	220.00	0.06 %
Tizzana	77,000	6	882.18	1.14 %
Valtriano	80,740	4	711.76	0.86 %

This table shows that the mutual society of Modigliana, the reinsurance of which was effected only on 1 May 1917, has not yet suffered any loss; the societies of St. Quirico d'Orcia and Poggibonsi have suffered a minimum loss; those of Ambra, Alta Staggia and Prato one which is below the average; those of Tizzana and Porcara have kept almost entirely within the anticipated limits of mortality; and that of Valtriano, while losing only 0.86 per cent., has received 130.88 liras in addition to the amount of its premium.

The profits attained by the federation therefore depended on the exceptionally favourable conditions of the year, owing to which one of the federated societies (Modigliano) suffered, as has been seen, no casualty in two months; seven kept more or less below the anticipated level of mortality; while one (Valtriano), although it did not reach the rate of mortality estimated for it, namely 1 per cent., received an indemnity greater than its reinsurance premium. The reason for these facts should be sought in the excessively low estimate of the insured capital, single animals having been valued, when insured, at much less than their actual value, so that when the losses which occurred were estimated each animal was found to have a far higher value.

As regards the more or less suitability of the reinsurance to the needs it is intended to supply, this — as the director of the federation in question observes in his report — cannot be gauged by the results of only one or two years, for there is no equal and constant average mortality for the live stock in one place: in a given year mortality may reach incredible proportions, such as would compromise the very existence of small mutual societies. From statistics of the mutual societies at work in Tuscany the following data are taken: the society of Prato in its first year of activity had a mortality of 2.42 per cent., in its second year 3.20 per cent., in its third 0.72 per cent.; the society of Tizzana in its first year had a mortality of about 2 per cent., in its second 1.60 per cent. in its third 1.14 per cent.; the society of Porcari one of 4.80 per cent in the first and 2.17 per cent. in the second year; that of Ambra an average of 0.90 per cent. in its first five years, 1.20 per cent. in its sixth, 0.46 per cent. in its seventh year, etc.

The federation with which we are concerned wished as far as possible to maintain an equilibrium among the burdens of various societies, and partially to compensate those which, owing to their excellent organization or low mortality, could contribute most largely to the formation of a federal reserve. Therefore article 25 provides that that half of the profits, which at the end of every year is not destined for the reserve fund, must go to diminish the contributions of the mutual federated societies in the next year, in the measure of the difference between the premiums paid and the indemnities received by each mutual society. On the basis of this article, which tends to render reinsurance less burdensome, the entire net profits, which in this first year amounted to 1141.49 liras were divided into two equal parts, of which the one — namely 570.75 liras — was appropriated to the reserve, while the other — 570.75 liras — was distributed, in the form of deductions from the reinsurance premiums due in the second year, among societies which on 30 June had paid the federation more than they had received from it.

The following table shows the difference in the case of each mutual society between the reinsurance premium and the indemnities received, the reimbursement quota being calculated as 60 per cent. of this difference :

Name of Mutual Society	Premiums paid	Indemnities received	Difference		Quota reimbursed
			received	paid	
Alta Staggia	723.27	591.90	—	131.77	78.82
Ambra	794.42	282.28	—	118.84	71.30
Modigliana	156.68	—	—	—	—
Poggibonsi	180.50	64.12	—	116.38	34.90
Porcari	424.93	412.38	—	12.55	7.52
Prato	1,203.61	838.00	—	365.38	—
Tizzana	441.63	441.09	—	0.54	—
Valtriano	225.00	355.88	130.88	—	—
St Quirico d'Orcia	384.58	65.00	—	264.78	158.86
	4,534.62	3,150.75	—	—	570.75

In the cases of the mutual societies of Ambra and St. Quirico d'Orcia, it should be noted further that the difference as calculated in the third column is not the arithmetical difference between premiums paid and indemnities received, since these two societies paid the reinsurance premium the one to cover the period up to 28 February 1918, the other to cover that up to 30 September 1917 ; and naturally in distributing premiums only the premiums due up to 30 June 1917 were taken into account.

Finally the federation devoted much of its activity to helping, especially in the matter of book-keeping, the adherent mutual societies ; and to propaganda in favour of the economical feeding of live stock, the more extensive cultivation of forage crops, and more intensive stock farming. In recognition of the federation's beneficent work the Ministry of Agriculture granted it a subsidy of 1500 liras, and this with half the year's profits — 570.75 liras — amounted to 2,070.75 liras, which sum constituted the federal reserve on 30 June 1917.

MISCELLANEOUS INFORMATION RELATING TO INSURANCE AND THRIFT IN VARIOUS COUNTRIES.

ITALY.

1. THE DEVELOPMENT OF THE "MUTUA AGRARIA GRANDINE" (1) OF BOLOGNA. *Bollettino dell'Associazione Agraria Parmense*, No. 17, Parma, 28 April 1917.

We have already stated, in speaking of the agricultural employers' societies in Italy (2), that their task is not confined to opposing resistance in various forms to the associations of labourers on the land, but that they also occupy themselves with organizing within themselves, in the interests of their members, various autonomous departments having economic and technical objects. One of these is the *Mutua Agraria Grandine* which has its offices at Bologna and was formed in 1911 by the *Federazione Interprovinciale Agraria*. This mutual society has adopted an insurance premium composed of two quotas, the one fixed, and the other variable but limited and levied only when the fixed premium is insufficient. The society's development appears in the following table.

Development of the Mutua Agraria Grandine of Bologna.

Year	Insured Capital	Premiums	Indemnities paid
	liras	liras	liras
1911	717,120	33,554.90	18,475.25
1912	2,928,710	133,111.09	136,056.94
1913	6,575,780	298,838.06	368,594.62
1914	9,734,150	571,841.23	601,880.10
1915	12,364,630	618,300.73	452,001.07
1916	14,405,390	776,676.05	569,586.12

Thus in six years the society has paid indemnities amounting to 2,146,594.10 liras. It reinsures the greater part of its risks with the Excess Insurance Company of London.

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2. THE "SOCIETÀ ITALIANA DI MUTUO SOCCORSO CONTRO I DANNI DELLA GRANDINE" (3) IN 1916. — Balance sheet for 1916. Milan. The society's printing-press, 1917.

This is one of the oldest societies in Italy insuring against losses occasioned by hail, for it was founded at Milan in 1857. We take the follow-

(1) Mutual Agricultural Hail Society.

(2) See our issue for April 1914, page 28.

(3) Italian Society for Mutual Help against Losses by Hail.

ing facts as to its last year of business from the report of its council of administration.

1916 gave the maximum figure for risks insured by the society: in round figures 100,800,000 liras with a membership of 17,731. The membership had increased by 1071 since the preceding year and the risks by about three and a half million liras. It was a year of violent hail. Out of 221 days of risk there were 99 on which the harvests of members were attacked (there were quite 75 days of hail in the summer), so that on 31 July actual losses of two and half million had already been recorded. The autumn was more propitious, bringing only 24 days of hail. Thus the summer which represents three quarters of the risks, represents a loss; but the autumn a gain. The year's balance-sheet shows a loss of 127,529.86 liras and an actual deficit, including premiums, indemnities and costs, of 268,292.68 liras; so that when losses had been paid, amounting to 3,786,973.08 liras, these together with costs of administration absorbed in addition to the recovered premiums income on capital to the extent 140,762.82 liras, and 127,529.86 liras which the council of administration took from the reserve fund. The deficit of 127,529.86 liras represents the difference between the tariff of 4.67 per cent, which would have been necessary to balance receipts and expenditure, and that of 4.54 per cent, which members actually paid.

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3. THE ORGANIZATION OF THE "TERRA ITALICA", A MUTUAL SOCIETY FOR INSURING AGAINST THE ACCIDENTS OF AGRICULTURAL LABOUR. — The society's by-laws, Rome, 1917.

In our issue for last March we announced the recent formation of a new mutual society for insuring against the accidents of agricultural labour (1) calling itself *Terra Italica* and being an outcome of the initiative of the woodcutters' syndicate. The new society has secured the adhesion of most of the members of this syndicate and of many farms in the various districts of Italy. As appears from its by-laws its headquarters are at Rome and its action extends over all the agricultural industries which its members practise in the kingdom. It proposes to pay to labourers employed on its members' farms, in case of the accidents contemplated by the law of 31 January 1904, No. 51, the indemnities fixed by a regulation made *ad hoc*. A statement must be made in the case of every farm to be insured: 1) as to the extent of land to be sown, planted with vines and planted with olive trees, that of the arable land lying bare, that of vineyards and special crops, that of underwood, and of woods of forest trees, edible chestnuts and pines, and that of uncultivated land and pastureland; 2) as to the families of labourers dependent on the farm with detailed lists of their members; 3) as to the numbers of labourers normally employed during the year and in the various seasons on agricultural labour.

(1) For mutual societies insuring in Italy against the accidents of agriculture see our issue for January 1917, page 43.

On admission a member must pay a fee of ten centimes for every hectare (1) of cultivated and five centimes for every hectare of uncultivated land. He must also pay annually fifty centimes on every hectare of land to be sown, seventy centimes on every hectare planted with vines or special crops, and three centimes on every hectare of uncultivated and pastureland. The annual insurance premium will be paid quarterly and in advance. The status of membership is completely acquired at midday on the day following that on which the admission fee and insurance premium are paid.

The members incur an obligation to remain in the society for five years. The society has the right to cause inspections in order to ascertain that there is sufficient provision for the safety of labourers. Every year in April members must inform the society of changes which may have occurred in their farms, in respect of area, crops or other particulars affecting in any way the estimate of wages. A provision should be noted which allows the council of administration, if at the end or even during the course of a business year it considers it necessary to increase its available funds in order to have the means of paying indemnities for accidents which have occurred, to invite members to pay a supplementary quota. Thus premiums are always exacted from members and paid by them only provisionally.

A member must pay sums demanded of him on any pretext within ten days of his reception of the request. The sums due may be augmented by fines at the rate of 10 per cent. of their total amount if payment is deferred more than ten days beyond the date fixed for it. The member concerned is responsible for accidents occurring during this interval of ten days. A member may be expelled for declarations of fact made in bad faith, if modifications introduced into his farm have transformed or aggravated risks, if he be declared to have failed, etc. He is thus excluded from all right to savings, the admission fee and the reserve funds. Finally if a farm be sold or given away the member concerned must advise the society within fifteen days and transfer to the grantee or purchaser the obligation to continue his insurance for the current year. He and his assigns are collectively responsible for the payment of the premiums for the current year.

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4. THE PROVINCIAL FEDERATION FOR THE REINSURANCE OF THE MUTUAL LIVE STOCK SOCIETIES OF THE PROVINCE OF PORTO MAURIZIO. — *La Mutualità Agraria*, No. 17, Rome, 20 June 1917.

This new federation has according to its by-laws the following objects: a) the encouragement of the formation of local mutual societies, and of the adhesion to the federation of those already formed or in course of formation; b) the direct or indirect assistance of federated mutual societies and the inspection of their administration and books; c) the organization of an active propaganda in favour of preventive measures intended to combat

(1) 1 hectare = 2.47 acres.

the infectious diseases of live stock, and the facilitation of the organization of a collective veterinary service and of the common purchase of medicines and disinfectants ; *d*) the stimulation, standardization and facilitation of the work of local mutual societies in improving zootechnical production, improving pasturage and local roads, establishing a stricter system of forestry, and inducing the societies to negotiate for agricultural credit, etc. ; *e*) the preparation of statistics, reports and all that can serve better to direct the work of insuring live stock ; *f*) the partial indemnification of the mutual federated societies for losses which may occur in any year owing to an excessive mortality among live stock due either to natural causes or to accidents.

The federation will moreover take on its own initiative such action as it judges to be in its own interest and that of its members in the matter of elaborating by-laws and rules and uniform systems of book-keeping. Adherent mutual societies will pay an entrance fee of ten francs for every hundred or fraction of a hundred members, and will have the right of availing themselves of the federation's legal services, consulting it, and benefiting by its technical and administrative inspections.

The federation reserves the right to inspect at any time the books of federated mutual societies, to make inspections and visits on the spot when live stock are being valued and when sicknesses and accidents occur. The mutual societies may not oppose this right.

The by-laws of mutual societies desiring to be federated must contain the following principles ; *a*) a strictly local sphere of action ; *b*) the individual insurance of animals ; *c*) insurance according to value ; *d*) the contribution of the insured to insurance at the rate of 20 per cent ; *e*) the premium fixed at no less than 1.20 per cent. of the value of the insured stock.

The federation undertakes to pay to a local mutual society two thirds of the indemnities annually due for *exceptional casualties*, that is those causing losses in excess of 1 per cent. of the insured value. The third part of the indemnity due for such excessive risk and that due for the whole ordinary risk are the liability of the local society.

The federation's income is constituted by the admission fees of the local mutual societies and the ordinary and extraordinary contributions of the State, the province, other institutions and individuals. It will provide for a reserve fund to be formed of extraordinary income and sums remaininig in hand at the end of each year (1).

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5. THE "CASSA MUTUA CONTRO GLI INFORTUNI AGRICOLI" (2) OF FLORENCE IN 1916. — *L'Agricoltura toscana*, No. 13, Florence, 15 July 1917.

In Italy there are six mutual societies formed by the spontaneous initiative of owners and managers of farms. They aim at insuring against

(1) In Italy other provincial federations of mutual live stock societies also practise reinsurance. The first of them to be active in this field was that of Milan, and recently like activity has been contemplated by the *Federazione Toscana delle Mutue Bestiame* (Tuscan Federation of Mutual Live Stock Societies). See our issue for December 1916, page 59.

(2) Mutual Fund against Agricultural Accidents.

the accidents of agriculture. They are situated at Vercelli, Florence, Bologna, Milan, Turin and Rome. One of the best organized is that of Florence which at the end of last February had 777 members insuring 979 farms, comprising 12,849 properties of a total area of 325,082 hectares (1). The families of labourers belonging to these farms comprised 124,997 persons. Sixteen fatal accidents occurred in 1916-17. The accidents of this year are classified in the following table in accordance with their consequences and are compared with those of previous years :

Year	No. of Accidents	Accidents leading to					In course
		Deaths	Per- manent invalidity total	Per- manent invalidity partial	Tem- porary invalidity indemni- fied	Temporary invalidity not indemni- fied	
—	Total	—	—	—	—	—	—
I 1909-10	190	1	—	14	77	98	—
II 1910-11	443	5	—	35	180	223	—
III 1911-12	659	9	—	51	268	331	—
IV 1912-13	788	11	—	63	336	378	—
V 1913-14	958	14	1	109	409	425	—
VI 1914-15	1,148	11	—	115	405	614	3
VII 1915-16	919	4	—	100	366	440	9
VIII 1916-17	749	16	—	32	203	384	114
	5,854	71	1	519	2,244	2,893	126

In order to facilitate the comparison of the different years, as regards the relation between the number of accidents and their consequences, the mutual fund of Florence has drawn up a little table, which we will presently reproduce, as to business in the years before 1916-1917. For the latter year, which closed on 28 February, there are as yet no definite figures, for 114 cases of accidents are in course of liquidation

Only the ratio of the fatal accidents, which numbered as we have said sixteen, is known. They constituted 21.3 per thousand of the total number, having in previous years varied from 4.3 to 4.5 for every thousand accidents intimated. The following is the little table regarding the six previous years :

Effects	Per 1000 accidents intimated					
	1910-11	1911-12	1912-13	1913-14	1914-15	1915-16
Death	11.2	13.6	12.6	14.5	9.5	4.3
Permanent invalidity .	79.0	77.4	76.2	105.5	100.0	108.9
Temporary invalidity in- demnified	406.3	406.7	426.4	428.0	352.8	398.2

(1) 1 hectare = 2.47 acres.

On 1 March 1917 this mutual fund began its ninth year of business. It is probable that before the year ends the insurance against accidents of labourers employed on farms will have become general in Italy by the effect of a special law.

UNITED STATES.

THE UNFAVOURABLE RESULTS OF INSURANCE AGAINST HAIL, IN 1916. — *The Economic World*, New York, 10 March 1917.

1911 was a bad year for insurance companies in the United States in so far as insurance against hail was concerned. There are as yet no detailed statistics for the whole country; but the Insurance Department of Massachusetts issues annual lists of figures, and so large a proportion of the more important companies report to this department that its list gives a good idea of general tendencies. The following are the figures thus supplied for 1916:

Company	Premiums	Losses
American	\$ 225,660.46	\$ 166,928.14
American Centra.l	33,466.80	72,268.93
City of Pittsburg	3,352.21	2,465.30
Cologne.	46,663.95	52,315.29
Commercial Union	284,700.00	316,340.00
Connecticut	159,839.41	113,985.41
Fire Reassurance	100,422.60	120,423.83
First Bulgarian.	123,169.99	157,022.65
First Russian	31,049.84	22,539.44
Frankline Fire, Pa. . . .	164,447.78	150,546.77
German Alliance	30,232.27	33,004.08
German American	653,363.42	656,914.61
Glens Falls	78,036.00	75,771.00
Globe and Rutgers	18,869.92	13,950.31
Hamburg	63,277.28	52,318.76
Hartford	1,651,390.00	1,646,777.00
Home	1,480,346.81	1,447,031.45
Imperial	40,784.67	44,824.41
Insurance Company of North America	—	393.75
Jakor	49,717.86	41,107.59
Liverpool and London and Globe	243,037.55	179,205.00
London amd Lancashire. .	34,482.00	30,962.49
Mechanics and Traders . .	34,834.41	28,868.12

Company	Premiums	Losses
Mercantile	11,882.09	11,771.43
Michigan Commercial . . .	54.75	—
Minerva	19,998.84	22,420.84
Minneapolis Fire and Marine	226,750.49	270,746.94
Moscow	49,679.73	36,063.07
National, Hartford	618,462.09	431,232.71
National Union	83,270.47	47,077.74
North Western National . .	409,899.93	363,535.44
Norwich Union	10,948.06	5,725.05
Old Colony	135.59	—
Orient	216,621.00	257,848.00
Palatine	102,443.00	158,787.00
Phoenix, Hartford	18,115.09	13,169.87
Phoenix, Assurance	87,361.31	89,072.13
Providence-Washington . .	92,521.37	94,519.98
Russia	148,575.87	167,883.60
Royal	30,307.02	25,210.54
Russian	31,049.84	22,539.44
Salamandra	49,717.86	41,107.59
Scottish Union and Na- tional	329.52	—
Second Russian	18,079.22	14,948.22
Security	156,697.70	170,906.00
South German	2,168.00	—
Springfield Fire and Ma- rine	495,571.07	476,046.07
St. Paul Fire and Marine..	1,055,725.72	1,060,749.13
Swiss Reinsurance	83,215.59	88,674.67
Westchester Fire	222,544.97	228,735.09
	\$ 9,793,271.22	\$ 9,725,734.88

With aggregate premiums of only \$9,793,271.22 as against aggregate losses of \$9,725,734.88, it goes without saying that the fifty companies in this list, taken as a body, lost heavily on their hail business in 1916; for commissions and management expenses, amounting on the average to well over 40 per cent. of premiums, had to be provided in addition to the losses. It is to be noted that of the fifty companies thirty showed some balance of premiums over losses — generally a very slender one — and twenty an absolute balance of losses over premiums. A careful comparison of losses and premiums makes it appear however, when account is taken of expenses, that virtually every company except the National of Hartford must have suffered a net loss last year. It is therefore not wonderful that a general raising of rates, as well as economy in administration and expenses, is now considered imperative by the companies.

URUGUAY.

THE STATE BANK OF INSURANCE AND INSURANCE AGAINST HAIL. — From the *Report and Balance-Sheet of the State Bank of Insurance in 1916*. Montevideo.

Owing to droughts, grasshoppers and frosts the harvest of 1916 in Uruguay was bad. The circumstance directly affected the business of the hail section of the State Bank of Agriculture, the development of which is necessarily connected with the condition of agriculture.

This section drew up in the year considered 2044 policies covering a value of \$ 1,118,639, as against 3867 policies, insuring altogether \$ 2,485,309, issued in 1915.

The following table shows the fluctuations of the business of insuring against hail from the year 1912 in which it was inaugurated.

	1912	1913	1914	1915	1916
Premiums	\$ 47,463	\$ 93,673	\$ 43,271	\$ 77,011	\$ 35,591
Indemnities . . .	\$ 8,977	\$ 27,893	\$ 10,259	\$ 2,410	\$ 3,720
Percentage of indemnities formed by premiums	19.22 %	26.77 %	24.63 %	3.13 %	10.45 %

The bank's propaganda action, exercised directly by the medium of its numerous agents, did not slacken ; but the unfavourable agricultural circumstances, which we have already noticed, paralysed its efforts. In 1915 it insured 104,890 hectares (1) but in 1916 the area covered by its policies was only 50,109 hectares.

The reduction of 1 per cent. granted in 1905 on tariffs affecting corn and flax was maintained last year. In addition to this reduction and in spite of the far from reassuring prospects which the sowing season opened up for this branch of the bank's business — prospects which have actually been realized — the administrative council thought itself obliged, owing to the damage done to crops by grasshoppers and frost, to add to its policies the following clause, the import of which need not be pointed out : "Agriculturists whose seeds have been wholly destroyed by frosts or grasshoppers after the issue of the policy will have a right to the reimbursement of 80 per cent. of the premium". The concession constitutes a remarkable improvement of insurance against hail : the reimbursement granted in similar circumstances in other countries is notably less.

(1) 1 hectare = 2.47 hectares.

Part III: Credit

ITALY.

THE AGRICULTURAL CREDIT OF THE SAVINGS BANK OF THE "BANCO DI NAPOLI" AND THE AGRICULTURAL CREDIT DEPARTMENT OF THE "BANCO DI SICILIA" IN 1916.

SOURCES:

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del credito e della previdenza, della cooperazione e delle assicurazioni sociali. (*Italian Le-
gislation on Agricultural Credit, Annals of Credit and Thrift.* — Year 1911, No 90. Ministry
of Agriculture, Industry and Commerce. General Direction of Credit, Thrift, Co-operation and
Social Insurance), Rome 1911.
- DECRETO LUOGOTENENZIALE N. 1913 CONCERNENTE PROVVEDIMENTI PER IL CREDITO AGRARIO
E PER L'AGRICOLTURA NELLE ZONE DANNEGGIATE DALLA INVASIONE DEI TOPI CAMPAGNOLI
(*Decree of the Lieutenantcy No. 1913 concerning Provisions for Agricultural Credit and Agri-
culture in the Zones damaged by the Invasion of Field Mice*), Gazzetta Ufficiale del Regno
d'Italia, Rome, No. 182, 3 August 1916.
- BANCO DI NAPOLI. CASSA DI RISPARMIO. CREDITO AGRARIO. RELAZIONE SULL'ESERCIZIO 1916
(*Bank of Naples. Savings Bank. Agricultural Credit. Report for 1916*), Naples, 1917.
- CONSIGLIO GENERALE DEL BANCO DI SICILIA. Sessione ordinaria del 1917. Rendiconto e bilancio
consuntivo sul servizio del Credito agrario. Esercizio 1916. (*General Council of the Bank of
Sicily. Ordinary meeting of 1917. Report and balance-sheet of the department of agricultural
credit. Year 1917*). Palermo 1917.

§ 1. THE WORKING OF THE DEPARTMENT OF AGRICULTURAL CREDIT IN THE "BANCO DI NAPOLI" AND "BANCO DI SICILIA".

As regards its organization of agricultural credit Italy can be divided into two parts of which the one comprises Piedmont, Lombardy, Venetia, Emilia and Tuscany, and the other Liguria, Marche, Umbria, Latium, the continental south and the islands. In the former the organization of credit originated in the spontaneous initiative of the agriculturists who united to form co-operative societies (popular banks, rural funds, etc.), thus themselves supplying the need for credit; in the latter, on the other hand, private initiative was weaker and had to be completed by the action of the State. Thus there arose the various laws on agricultural credit which, in

response to the peculiar needs of single districts of Central, Southern and insular Italy, founded in them special institutions of credit. The chief of these laws are that of 7 July 1901 which authorized the savings bank of the *Banco di Napoli* to afford agricultural credit in the provinces of the southern continent of Italy and the island of Sardinia, and that of 29 March 1906 which instituted in the *Banco di Sicilia* a department for the exercise of agricultural credit. We should also recall the laws of 21 December 1902, 31 March 1904 and 25 June 1906, which concerned agricultural credit in Latium, Basilicata and Calabria, respectively, etc.

The fundamental principle of this legislation is that credit should, as a rule, be distributed among agriculturists not directly but by the medium of local institutions, preferably co-operative in form, which are called *intermediary*. Most of them are rural funds, popular banks, agricultural consortia, etc.; and since they are somewhat scarce in Southern Italy and the islands the laws which have been cited provide for the encouragement of their foundation by prize competitions and other means. Thus of recent years numerous *agricultural funds* have arisen and have noticeably increased the number of existing intermediary institutions. These are usually accredited by the various central institutions of credit (savings-bank of the *Banco di Napoli*, agricultural credit department of the *Banco di Sicilia*, Institute of Agricultural Credit for Latium, etc.) with a given sum, fixed according to their importance and the security they can offer.

The business which the two cited banks — the most noteworthy of Italian banks exercising agricultural credit — are authorized to undertake by the laws which respectively regard them may be summed up as follows:

- a) Acceptance for discount of bills issued by agriculturists for the various needs of their farms and ceded by the intermediary institutions;
- b) Acceptance for discount of bills directly issued by the latter either to procure the necessary means for the collective acquisition of materials useful to agriculture or to make advances to members in the case of collective sales of their products, etc.

In order that this transaction may take place it is necessary that the loan be proved to have an agricultural purpose. The borrowers are therefore specified: they must be landowners themselves farming their lands, holders of long leases, *métayers* or labourers receiving partial profits, or tenants of rural holdings. Moreover the land for the benefit of which the loan is requested must be situated within the sphere of activity of the lending institution; and the purpose of the loan must be stated in the application for it.

Unless their purpose demands that they be less, loans must have certain maximum limits as regards their amount and the time for which they are granted, such limits being 1,000 liras and one year for loans implying a legal preference (over the harvest, crops, seeds, manures, fertilizers), 2,000 liras and three years for loans to finance cattle farms, and 3,000 liras and three years for loans for the purchase of machinery.

As has been said, loans cannot normally be made to single agriculturists, but only to intermediary institutions among which those having

exclusively agricultural aims and character should be preferred. The loans should be made by the two banks cited to intermediary institutions at the maximum rate of 4 per cent., and by the latter to their members at the maximum rate of 6 per cent. The security given by the intermediary institutions is their own capital if they have limited, and that of their members if they have unlimited liability. The amount of possible loans varies in accordance with the capital and with the form of security given by the institutions. The latter enjoy in their turn, in relation to their members, special privileges, and also a true legal privilege established by article 1958 of the Italian civil code, which we have already mentioned, and a privilege by agreement arising out of the law of 23 January 1887 which has reference to the sums due to furnish live and other stock, agricultural machinery and implements, plant for the handling of agricultural products and all that can be useful to agriculture.

Such is, broadly, the system of State-regulated agricultural credit in the Banks of Naples and Sicily. We will now examine the work accomplished by these two banks in 1916.

§ 2. THE AGRICULTURAL CREDIT OF THE SAVINGS-BANKS OF THE "BANCO DI NAPOLI".

The Intermediary Institutions. — As appears in the last report of the Bank of Naples the institutions by the medium of which agricultural credit is, according to the law, distributed, increased from 2145, which was their number on 31 December 1915, to 2179, their number on the same date in 1916.

Of this number only 1203 were considered to be "good", that is fit to distribute credit. They were distributed as follows as regards their kind:

Agricultural and rural funds	482
<i>Monti frumentari e nummari</i> of Sardinia	288
Popular banks	145
Funds for agricultural loans	121
Agricultural consortia	120
Savings banks	16
Societies of agricultural credit	9
<i>Monti frumentari</i>	8
Societies of mutual aid	8
Provincial autonomous funds of agricultural credit	6

. . . 1,203

Of these 1203 "good" institutions 114 (including 109 popular banks) are accredited at the bank for ordinary discount. Of their whole number 40.06 per cent. are nominally collective societies having collective and unlimited liability. This form of association is found throughout the eighteen provinces of the south and Sardinia: the province of Cagliari has the largest

number of societies of the sort, namely 127, that of Aquila 56, that of Salerno 51, that of Caserta 45 and that of Sassari 30.

At the end of 1916 there were 727 institutions which had opened current accounts for the amount of 28,695,100 liras; and they included 302 agricultural and rural funds -- accounts for 10,124,500 liras, 130 popular banks -- for 5,876,000 liras, and 91 agricultural consortia -- for 8,475,500 liras. These institutions and the aforesaid sum of 28,695,100 liras were distributed as follows among the provinces:

Province	Number of Institutions	Current accounts opened — Liras
Sassari	89	1,596,000
Caserta	76	2,191,000
Cagliari	72	1,084,000
Teramo	65	2,392,000
Foggia	54	5,444,500
Aquila	50	1,765,000
Salerno	45	2,050,000
Benevento	37	765,000
Catanzaro	35	1,243,600
Lecce	33	1,348,000
Avellino	30	608,000
Reggio Calabria	24	1,149,000
Chieti	24	627,000
Bari	23	3,408,000
Campobasso	23	1,065,000
Potenza	22	1,268,000
Cosenza	14	401,000
Naples	11	290,000
Total	727	28,695,100

The greatest number of agricultural and rural funds are found in the province of Aquila which has 45 of them. Next to it come Salerno and Caserta with 39 each, Cagliari with 33, Avellino with 20, Benevento with 19, etc.

The greatest number of agricultural consortia are found in the province of Caserta which has 13 of them. There follow the provinces of Benevento with 11, Lecce with 10, Foggia with 9, etc.

Agricultural Credit Transactions effected in 1916. -- Credit was afforded this year by the savings-bank of the bank for 11,934,643 liras (2,602,861 liras with the bank's own funds and 9,331,782 with the funds of the provincial funds of agricultural credit).

Altogether discount was given for 7,644,208 liras, direct loans to agriculturists amounted to 271,617 liras and direct discount to intermediary institutions to 4,018,818 liras.

In spite of the difficulties of the money market the rate of interest of the preceding year — 3 $\frac{1}{2}$ per cent. — remained unaltered for the rediscount and direct discount concluded with intermediary institutions, and the rate of 4 per cent. for operations with agriculturists directly. The intermediary institutions imposed rates of interest varying from 4 to 6 per cent. but most usually 5 and 5 $\frac{1}{2}$ per cent.

Operations of rediscount and direct loans were distributed as follows according to their objects :

1) *Loans enjoying a legal privilege :*

on the harvest	number	128	liras	48,798.65
" crops		6,599	"	2,757,550.55
" seeds.		2,487	"	777,582.72
" manures		3,223	"	659,140.58
" fertilizers		2,700	"	605,427.63
" food of settlers		135	"	14,605.93
" food of labourers		—	"	—
various		2,061	"	997,829.08
	number	17,333	liras	5,860,935.14

2) *Loans not secured by a privilege :*

on cattle	number	2,370	liras	1,578,106.38
" small live stock		339	"	83,566.48
" machinery		193	"	142,047.60
" agricultural implements		181	"	36,753.49
" stock other than live stock.		98	"	29,568.12
various		1	"	315.25
	number	3,182	liras	1,870,357.32

3) *Loans secured by pledged deposited agricultural products :*

by cereals	19	liras	184,533
" wine	—	"	—
" almonds	—	"	—
	<hr/>		<hr/>
number	19	liras	184,533

The loans enjoying a legal privilege represent 74.04 per cent. of the total credit afforded to agriculturists ; those not secured by a privilege 23.62 per cent. ; and those secured by deposited agricultural products 2.34 per cent.

Of the loans 13,393 for 5,310,916.87 liras were granted to landowning farmers ; 5,903 for 2,305,848.24 liras to tenants ; 671 for 139,263.99 to holders of long leases ; and 567 for 159,796.36 liras to *métayers* and cultivators receiving a share of profits.

As regards the distribution of credit it is enough to note that of 21,161 loans 7,034 were of less than 100 liras, 9,611 of sums between 100 and 500 liras, and 3,122 of sums between 500 and 1000 liras ; so that 93 per cent. of the total number of loans and about 49 per cent. of their total amount were accounted for by operations covering less than 1000 liras.

Of operations of direct discount with intermediary institutions 335 for 2,666,544 liras were for the collective acquisition of materials useful to agriculture, 20 for 633,700 liras were for collective sales of agricultural products, and 272 for 718,572 liras were to supply the deficiency of resources of their own from which intermediary institutions suffered. Applications for such discount came almost always from agricultural consortia and agricultural and rural funds.

Altogether in 1916 the savings-bank of the *Banco di Napoli* distributed credit as follows among the various provinces :

Credit obtained by each Province in 1916.

Province	Liras
Bari.	1,594,553.44
Salerno	1,502,632.97
Caserta	1,497,557.03
Teramo	1,199,949.61
Foggia	1,166,814.80
Aquila	973,720.73
Lecce	742,354.08
Campobasso	653,480.56
Reggio Calabria	550,698.00
Sassari	488,188.06
Benevento	359,329.38
Avellino.	345,886.40
Chieti.	245,876.01
Cagliari	221,355.64
Catanzaro	177,041.75
Naples	138,617.13
Cosenza	69,087.00
Potenza	7,500.06
	<hr/>
	11,934,642.66

In its fifteen years of activity the agricultural credit of the savings-bank of the *Banco di Napoli* has distributed in the Southern and Sardinian provinces the remarkable sum of 102,805,000 liras. Of this sum only 2,740,064 liras are accounted for by loans to agriculturists, the remainder

having been distributed, as the law prefers, by the means of local institutions, especially agricultural consortia.

The general movement of credit in the period indicated can be specified as follows: rediscount to intermediary institutions 77,360,834.16 liras; direct loans to agriculturists 2,740,064.21 liras; direct discount to intermediary institutions 22,704,684.97 liras.

§ 3. THE EXERCISE OF AGRICULTURAL CREDIT BY THE SAVINGS-BANK OF THE "BANCO DI NAPOLI" WITH STATE FUNDS UNDER THE DECREE OF 27 JULY 1916.

The transactions with which the preceding part of this article has dealt represent *ordinary* credit, that is credit exercised by the savings banks of the *Banco di Napoli* for every crop and every province mentioned above, on the basis of the laws of 7 July 1901, no. 334, and 2 February 1911, no. 70. In 1916 however, in virtue of a lieutenant's decree of 27 July of that year (no. 913), the savings bank of the *Banco di Napoli* was authorized to exercise, with funds advanced by the State, *extraordinary* credit for the growing of cereals only, in the provinces of Foggia, Bari and Campobasso, which had suffered serious loss by the failure of harvests for three years and an invasion of field-mice. The sum placed at the disposal of the Treasury for these three provinces, and also for the province of Potenza which was in an analogous condition, amounted altogether to 20,000,000 liras (1). According to the aforesaid decree this sum was to be employed on subventions, paying interest at the rate of 2 per cent., to provide seeds, fodder for live stock and the expenses of cultivation at the rate of not more than 200 liras for every hectare (2) to be sown. Such subventions could be made: *a*) to landowners and holders of long leases cultivating their lands directly and having a taxable income amounting to no more than 5000 liras; *b*) to farmers bound by any sort of contract. The subventions are granted directly to applicants whenever and wherever they cannot be granted by the medium of intermediary institutions.

According to an investigation of the Ministry of Agriculture the aforesaid sum of 20,000,000 liras was, after the number of the affected communes and the importance of their losses had been taken into account, distributed as follows among the provinces affected:

		Liras
Province of	Foggia	12,700,000
" "	Bari	4,300,000
" "	Campobasso	1,000,000
" "	Potenza	2,000,000
		<hr/> 20,000,000

(1) By the decree of 6 May 1917, no. 737, other eight million liras were assigned to the expenses of the harvest.

(2) 1 hectare = 2.47 acres.

The sum of 2,000,000 liras thus destined for Potenza, increased by 250,000 liras taken from the sum destined for Bari, was paid in several instalments, according to the requests made, into the provincial fund for agricultural credit for Basilicata which was entrusted with its employment conformably to the aforementioned decree. The operations having reference to the other provinces, Foggia, Bari and Campobasso, were entrusted to the respective provincial funds, administered, as is known, by the savings-bank of the *Banco di Napoli*.

The agriculturists of these three districts made to this savingsbank 10,588 applications for a total sum of 17,344,562 liras, in response to which loans were granted amounting on 31 December 1916 to 13,729,927 liras. Of this sum direct loans (of 8,680,063 liras) constituted 63.22 per cent., and re-discounts (5,049,863 liras) — that is loans by the medium of institutions — constituted 36.78 per cent.

By means of the agricultural consortia, 3,239,338 liras were distributed; by means of the agricultural and rural funds 985,616 liras; by means of the funds for agricultural loans 316,235 liras; and by means of the popular banks 508,673 liras. The first place is, as always, occupied by the agricultural consortia.

According to the form and objects of these loans the aforementioned sum of 13,729,927.24 liras was distributed as follows:

			Liras
subventions in money	number of loans	13,865	6,421,347.26
" " kind	" " "	7,622	7,308,579.24
total loans		21,487	13,729,926.50

Of the total sum of loans 46.76 per cent. was constituted by those in money and 53.24 per cent. by those in kind. To landowners 3,844,409 liras were conceded, to holders of long leases 110,519 liras, to *métayers* and cultivators receiving a share of profits 187,371 liras, to tenants having short leases 9,587,626 liras.

Contrary to what is found to be true of ordinary operations of agricultural credit, in which a higher percentage is accounted for by landowners than by borrowers of the three other categories, tenants having short leases here predominate, receiving 69.80 per cent. of the whole sum of State capital distributed.

The three provinces received altogether — Foggia 10,230,300 liras; Bari 2,696,764 liras; and Campobasso 822,862 liras.

§ 4. THE DEPARTMENT OF AGRICULTURAL CREDIT IN THE "BANCO DI SICILIA".

The Intermediary Institutions. — As appears in the bank's report the institutions admitted to credit on 31 December 1916 numbered 324 and their own capital amounted to 3,304,111 liras. They comprised 46,648 members with a total presumed capital of 217,035,845 liras. Of these institutions 304 had the form of co-operative societies, and of such 264 were nominally collective, 37 had limited liability and 3 were limited joint-stock companies. Twenty were legal corporations. The institutions were distributed as follows among the seven provinces of the island: Girgenti 64, Palermo 56, Catania 50, Caltanissetta 49, Trapani 47, Syracuse 30, and Messina 28. According to their nature they can be classified as follows:

Co-operative agricultural societies of production and labour	134				
Agricultural funds	<table> <tr> <td>Societies</td><td>83</td></tr> <tr> <td>Civil persons</td><td>8</td></tr> </table>	Societies	83	Civil persons	8
Societies	83				
Civil persons	8				
Agricultural consortia	18				
Rural funds	46				
<i>Monti frumentari</i>	11				
Agricultural banks	13				
Popular banks	4				
Agricultural societies	7				

Of these societies thus accredited by the bank 37 lease collectively a total area of 28,809.4854 hectares.

In 1916 as previously the society exercised caution in accrediting institutions, wishing better to guarantee the credit conceded. The total credit enjoyed by the institutions amounted to 15,178,000 liras.

It is interesting to notice that 190 of the 357 communes of the island contained at the end of 1916 institutions admitted to credit, while 167 were without them. Each of 109 communes contained one of such institutions and the others more than one — one had as many as 12.

In 1916 these institutions were as always carefully watched: 130 inspections took place and in the large majority of cases discovered that the institutions were working normally.

The Operations Effected. — In 1916 the department effected 24,575 operations for 7,792,580 liras. Of them 24,525 for 7,587,080 liras depended on operations concluded with or by the medium of intermediary institutions. The others were concluded with individuals directly.

The operations concluded are distributed as follows among the various provinces: Palermo 1,847, 313.59 liras; Girgenti 1,222, 177.21 liras; Trapani 1,092, 528.38 liras; Syracuse 1,703, 445.56 liras; Caltagirone 975, 500.39 liras; Caltanissetta 814, 975.36 liras; Messina 430, 486.24 liras; Catania 336, 153.87 liras.

As regards its aim the discount granted in 1916 was distributed as follows :

For seeds, manures, fertilizers, crops and harvest	Number 24,163 for	5,913,329 liras
For machinery, agricultural imple- ments and live and other stock	" 175 "	147,756 "
Direct discount to intermediary institutions	" 237 "	1,731,495 "

In accordance with the classes of the borrowers and with the various crops operations were distributed as appears in the following Tables I and II.

In 1916 the rate of interest remained at $4 \frac{1}{4}$ per cent. for operations of discount and rediscount by the department, and consequently the maximum rate which intermediary institutions could charge to borrowers remained at $6 \frac{1}{4}$ per cent.

TABLE I. — *Classification of operations according to the classes of the borrowers.*

Establishments at	Landowners		Holders of long leases		Métayers		Holders of short leases		Total	
	Bills	Sum liras	Bills	Sum liras	Bills	Sum liras	Bills	Sum liras	Bills	Sum liras
Palermo	3,111	862,845.63	98	21,311.00	137	24,457.60	853	296,475.47	4,199	1,204,889.70
Messina	758	292,048.89	1	168.00	43	10,293.00	51	20,392.60	853	322,902.49
Catania.	413	108,155.82	1	1,000.00	111	21,419.20	263	54,128.85	788	184,703.87
Sirgenti	1,415	391,962.53	20	5,096.60	445	91,612.34	1,623	502,059.64	3,503	990,731.11
Trapani	650	175,398.54	23	9,190.00	72	11,087.00	3,186	593,497.22	3,931	789,172.76
Syracuse	989	400,873.21	1,076	225,846.35	211	45,442.40	2,082	310,641.05	4,358	982,803.01
Caltanissetta	1,209	237,069.60	49	10,225.90	460	72,304.00	2,008	406,226.81	3,726	725,826.31
Callagrone	1,672	518,185.75	13	1,320.00	95	14,300.10	1,200	326,250.45	2,980	860,056.30
Total	10,217	2,986,539.97	1,281	274,157.85	1,574	290,915.64	11,266	2,509,472.09	24,338	6,061,085.55

(a) In addition 237 bills for a sum of 1,731,495.05 liras were discounted to the institutions directly for various objects.

TABLE II. — *Classification of the operations according to the various crops.*

Establishments at	Sown lands		Vines		Citrus plantations		Olive-tree plantations		Various crops		Total	
	Bills	Sum liras	Bills	Sum liras	Bills	Sum liras	Bills	Sum liras	Bills	Sum liras	Bills	Sum liras
Palermo	533	147,846.17	1,209	253,402.52	1,791	667,911.34	315	89,191.37	291	40,478.30	4,199	1,294,889.70
Messina	123	57,412.52	284	89,035.10	272	126,804.10	111	24,317.44	63	25,333.33	853	322,902.49
Catania	441	88,402.24	154	25,330.00	13	4,465.60	7	1,608.45	173	64,897.58	788	184,703.87
Girgenti	2,372	659,974.76	346	115,581.00	18	6,175.00	31	9,657.30	736	208,343.05	3,503	990,731.11
Trapani	2,767	482,693.13	685	205,012.80	—	—	2	500.00	477	100,066.83	3,931	780,172.76
Syracuse	590	228,903.96	3,091	475,114.30	276	181,635.00	12	3,000.00	389	94,149.75	4,358	982,803.01
Caltanissetta	3,115	572,793.01	428	100,522.10	—	—	4	1,010.00	179	51,501.20	3,726	725,826.31
Caltagirone	2,120	598,174.45	744	190,333.40	75	41,474.10	—	—	41	30,974.35	2,980	800,056.30
Total	12,061	2,827,200.24	7,001	1,455,201.22	2,445	1,028,465.14	482	126,284.56	2,349	623,844.39	24,338	6,061,085.55 (i)

(i) In addition 237 bills for 1,731,495.05 liras were discounted to the institutions directly.

MISCELLANEOUS INFORMATION RELATING TO CREDIT IN VARIOUS COUNTRIES.

ARGENTINE REPUBLIC.

THE NATIONAL MORTGAGE BANK, — *Banque hypothécaire nationale. Rapport sur les opérations de l'année 1915.* 52 pp. Comi brothers, Buenos Ayres, 1916.

The report of this bank on the year 1915 shows first of all that in this year it filled only a purely administrative role. The disturbances caused by the European war, and the great difficulties which the course of finances and economics throughout the world has consequently encountered, have obliged the bank to delay all new issues of mortgage bonds until the various markets are able to offer conditions as profitable as those which formerly prevailed to new securities.

The National Mortgage Bank has devoted itself especially to a study of the money markets, and has at the same time scrupulously watched over the numerous mortgage loans represented by the paper it holds.

The report shows that in 1915 the Argentine mortgage bond was sought after, in the markets for securities both in the Argentine and elsewhere, as a safe and stable income-producing security. This is natural where Argentine savings are concerned, for the investment is sufficiently remunerative, bringing in from 5 to 6 per cent. The security is attractive even to large capital for it can at any time be converted into cash, so active is the business in the bonds.

There is nothing abnormal in their movement during 1915. Such of them as emanated from Europe, as a consequence of the war, represent only a very small amount as compared with the 300,000,000 pesos (1) estimated to be thus invested in Europe.

The bank's business is characterized by nothing further of particular interest. In this year no new loan was made in the form of mortgage bonds; 39 loans were made in specie for the execution of works on private properties and they represented a sum of 45,680 pesos; 34 loans for 39,680 pesos were made in the federal capital, and 5 for 6,000 pesos in the provinces.

On 31 December 1915 there were in force 29,397 loans for a total value of 577,483,631 pesos. As regards interest the loans of preceding years were distributed as follows:

	Number	Amount — pesos	Interest due — pesos
Regular loans	18,778	330,859,496	—
Loans on which interest for 1 half-year is due	4,618	87,089,145	3,503,283.75
" " " " " 2 half-years "	2,685	62,355,420	5,007,872.50
" " " " " more than 2 "	3,253	96,962,570	7,577,205.50
Total . . .	29,339	577,266,631	26,088,360.75

(1) 1 peso = about 4s at par.

The following are some data as to the bank's circulation and issue and the average value of mortgage bonds in the five years from 1911 to 1915:

Year	Circulation on 31 December — pesos	Issue		Average value per cent.	Loans in force on 31 December pesos
		Series	Amount — pesos		
1911	336,662,700	C. H. A. 6 %	115,926,600	99.87	377,071,351
1912	442,538,175	C. H. A. 6 %	140,647,900	97.36	485,324,126
1913	499,426,600	C. H. A. 6 %	91,062,700	97.42	552,713,562
1914	535,162,850	2nd 1. 9155, 1st series	49,926,300	87.44	586,629,145
1915	520,297,100	—	—	90.37	575,572,840

The reserve fund of the Mortgage Bank amounted on 31 December 1915 to 37,670,603.30 pesos, and the reserve intended for the concession of loans to 11,204,727.07 pesos.

GERMANY.

1. THE CONSOLIDATION OF PROPERTY IN PRUSSIA. — Dr. Jur. Albert Dietrich: Der Weg der Besitzfestigung. *Jahrbuch der Bodenreform*. Jena, Gustav Fischer, 21 June 1917.

Two years after the *Besitzfestigungsgesetz* (Consolidation of Property Law) had come into force, that is when it was possible to perceive its first results, we explained that while it would strengthen the policy of interior colonization it would at the same time solve the problem of emancipating land from mortgages (1). It was therefore logical that it should first be applied in the districts in which property was most mortgaged, and such was the course followed. The task was first undertaken in Posnania and West Prussia; and then — thanks to the action of the *Ostpreussische Landgesellschaft* (East Prussian Land Society), the *Pommersche* (Pomeranian) *Landgesellschaft* and the *Schleswig-Holsteinsche Höfebank* (Schleswig Holstein Courts' Bank) — in Pomerania, Silesia and Schleswig-Holstein. The development of this enterprise is interesting to follow, for the consolidation of property cannot fail to have a good effect, from the point of view of agriculture, in the districts where it is realized.

The parts of Prussia specified in the programme, by the ruling of 12 March 1913, are also those to which, as well as to Posnania and West Prussia, the law of 26 June 1912 was progressively applied. They are:

East Prussia:

District of government of Königsberg, circle of Rastenberg.

District of government of Gumbinnen, circles of Angerburg, Goldap and Oletzko.

District of government of Allenstein, all circles.

(1) See our issue for August 1914, *Bulletin of Economic and Social Institutions*, Vol. XLIV, 5th year, No. 8, pp. 85 *et seq.*

Pomerania:

District of government of Köslin, circles of Bütow, Lauenburg; in the provincial circle of Stolp the administrative districts of Bochowke, Gross-Nossin, Kose, Mickrow, Schworz-Damerkow and Wündichow.

Silesia:

District of government of Liegnitz, circle of Freystadt, town and provincial circle of Glogau, circles of Grünberg, Lüben, Sagan and Sprottau. District of government of Breslau, circles of Gross-Watensleben, Guhrau, Militsch, Namslau; in the circle of Öls the administrative districts of Briese, Gross-Graben Pontwitz, Stronn, Ulbersdorf; circle of Steinau; circle of Trebnitz except administrative district of Bischwitz, of Hennigsdorf, of Hühnern, of Kapsdorf, of Schebitz, of Wohlau.

District of government of Oppeln except circles of Grottkau and Leobschütz and the town and provincial district of Neisse.

Schleswig-Holstein:

District of government of Schleswig, circles of Hadersleben, Apenrade, Sonderburg, Flensburg; administrative districts of Born, Haude Witt, Harrislee, Oeversee; circle of Tondern; administrative districts of Abel, Ballum, Brede, Bülderup, Buhrkall, Döstrup, Emmerleff, Hostrup, Klixbüll, Ladelund, Medelby. Mögeltondern, Neukirchen, Norderlügum, Osterhoist, Rackstedt, Röm, Ruttebüllerkoog, Süderlügum, Tingleff, Wiesby, the places said to be of Horzer and of Lügumkloster, and the district and town of Tondern.

In these places, as in Posnania and East Prussia, it is provincial societies for interior colonization who are responsible for the consolidation of property; and they are helped by the State, the province, public communal and other organizations and co-operative organizations. The following figures show the part of the capital of the four land societies, already named, which is thus contributed by organizations:

Names of Societies	Capital of Societies	Of States	Shares of public communal and other organizations	Of co-operative and other organizations
	marks	marks	marks	marks
Ostpreussische Landgesellschaft	7,651,000	4,000,000	3,200,000	451,000
Pommersche Landgesellschaft	6,250,000	3,250,000	2,448,000	552,000
Schlesische Landgesellschaft	5,550,000	2,750,000	1,500,000	1,250,000
Schleswig - Holsteinische Landgesellschaft	1,000,000	600,000	25,000	375,000

The role thus incumbent on co-operative organizations seems to have been at first relatively small, but there is reason to believe that it must necessarily increase.

Their task is recognized to be that of seeking, even outside the limits of the plan dictated by the law on the consolidation of property, to bring about within their spheres the emancipation of agricultural property from mortgages.

These united efforts were first exercised in Posnania and West Prussia between 1905 and 1906, some years before the law on the consolidation of property was promulgated. In 1913 they spread to the four other provinces. On 31 December 1916 they had yielded appreciable results, expressed by the following figures :

Provinces	Date at which the procedure for consolidation was first applied	Peasants' Properties		Large Properties		Properties subject to the <i>Verschuldungsgrenze</i>		Total area
		Number	Area	Number	Area	Number	Area	
		—	hectares	—	hectares	—	hectares	hectares
Posnania. . .	1905	5,912	97,922	88	55,204	47	29,865	153,126
West Prussia .	1906	5,354	118,580	159	66,023	22	11,412	184,603
East Prussia .	1913	12	1,696	3	1,143	—	—	2,839
Pomerania . .	1913	179	6,044	12	6,911	7	4,562	12,955
Silesia	1913	269	6,288	30	12,275	9	9,893	18,563
Schleswig Holstein	1913	359	10,726	7	1,592	6	1,217	12,318

These figures show us that of the provisions regarding interior colonization, the consolidation of property and emancipation from mortgages, one is relatively important, that namely which imposes the *Verschuldungsgrenze*. This is a maximum limit to mortgage debts on land employed for purposes of agriculture or forestry. It was established by the law of 20 August 1906 and was intended to reduce mortgage burdens, it being argued logically that the first step towards lessening these burdens should be an effort to limit their growth. The result thus obtained is the more interesting because this limitation of mortgage burdens may be said to be optional, since the provision fixing a maximum charge cannot be registered in the land books except at the request of the proprietor.

But while obtaining that about 15 per cent. of the consolidated properties were subject to a limitation on their future burdens, a disburdening was at the same time also effected in the shape of a real diminution of charges, as will be seen from the following data, in which these charges in the five or six provinces (1) contemplated are compared as regards their state before the law on consolidation was promulgated and its subsequent modification.

(1) The data for East Prussia are lacking.

	Before the consolidation of the property			After the consolidation of the property			Reduction		
	Interest — marks	Amortization quota — marks	Annual charges — marks	Interest — marks	Amortization quota — marks	Annual charges — marks	Of annual charges — marks	Of interest — marks	
Posnanian { Peasants' properties Large properties	4,244,200	94,900	4,339,100	3,309,600	554,400	3,864,000	475,100	10.9	934,600 22.62
	2,089,680	113,970	2,203,650	1,782,290	318,290	2,100,580	103,070	4.7	307,390 10.1
West Prussia { Peasants' properties Large properties	6,609,555	174,307	6,783,862	5,321,750	781,980	6,103,730	680,132	10.03	1,287,805 19.3
	2,980,265	126,192	3,106,457	2,613,213	455,105	3,068,318	38,139	1.2	367,052 12.3
Pomerania { Peasants' properties Large properties	269,137	3,235	272,372	223,715	29,383	253,098	19,274	7.15	45,422 16.87
	273,522	14,612	288,134	229,229	39,264	268,493	19,641	6.8	44,203 16.2
Silesia { Peasants' properties Large properties	340,402	10,512	350,914	306,617	39,448	346,067	4,847	1.39	33,783 9.9
	538,158	41,306	579,464	499,705	97,963	597,668	—	—	38,453 7.1
Schleswig-Holstein { Peasants' properties Large properties	516,535	23,521	540,056	432,547	68,522	501,069	38,987	7.22	83,988 16.20
	106,178	6,986	113,164	88,326	17,902	106,228	6,936	6.13	17,852 16.81

*
* *

2. THE PROROGATION OF MORTGAGE DEBTS FROM 31 JULY 1914 TO 31 DECEMBER 1916. — *Verlängerung im Kriege fällig gewordener Hypotheken.* — *Bankarchiv*, 1 February 1916 and 1 May 1917.

At the beginning of the present war, on 7 August 1914, Germany decreed a legal moratorium affecting all private credit. The courts were authorized to grant to debtors a prorogation for three months of the date on which payments fell due, if the step were justified by their economic circumstances.

Later, on 22 December 1914 and 8 June 1916, decrees were voted which concerned especially the prolongation of the period allowed for the payment of mortgage debts. These decrees authorize the courts to grant, such prorogation to mortgage debtors on the following conditions (art. 1):

- 1) that the debtor's economic position justify the grant;
- 2) that the debtor have shown himself worthy of the privilege by his punctual payments before the war;
- 3) that the creditor suffer no extreme disadvantage.

The prorogation is granted by means of a sentence or a legal decision (art. 1 and 4).

For the principal debt, that is the capital, the delay is for twelve months, after which the courts are authorized to grant a new prorogation for twelve months, similarly renewable. Where interest is concerned the prorogation is for six months only and cannot be renewed (art. 2 and 5).

Besides this legal moratorium there is a moratorium by contract; that is to say the date of payment may be prorogued by a contract between a debtor and a creditor. In the case of debts other than mortgage debts the contracting parties may come to a free agreement as to the terms of such a contract; but in the case of mortgage debts these terms must follow an agreement made among the German mortgage banks which belong to the Central Association of German Banks and Bankers. This agreement was concluded on 1 February 1916 and signed by twenty-seven German mortgage banks. The ten remaining mortgage banks granted prorogation to their debtors in accordance with the terms of this agreement, in spite of the fact that they did not sign it.

The terms of the agreement are as follows:

1. The mortgage banks are bound to grant a prorogation of the date of payment to their members, even if such is not granted by the courts.

2. The prorogation is for a longer or shorter period — six months to ten years.

3. In granting it the creditor bank may not exact either too high a rate of interest or an excessive commission.

4. These provisions do not apply to debts contracted during the war, in the case of which creditors need not grant a prorogation, or may grant it on conditions other than those which have been set out.

The special committee of the Central Association of German Banks and Bankers presented to the sub-secretary of the Ministry of Interior Affairs a report on the results of those prorogations of the terms of mortgage loans which were made in accordance with the terms of the aforesaid agreement. We borrow from this report (1) its most important data.

These data are supplied by twenty-nine mortgage banks and show what prorogations were granted by them from the beginning of the war until 31 December 1916.

Altogether 22,196 prorogations were granted but the report is concerned with only 22,072, so that the conditions of 124 are not indicated. Out of these 22,072 prorogations.

12,385	were for a period of	10 years ;
6,255	" " " " "	less than 10 years ; and
3,432	" " "	an indeterminate period.

The rate of interest stipulated was :

4 1/2	per cent. in the case of	12,866	prorogations
from 4 1/2 to 4 3/4	" " " " "	7,654	"
" 4 3/4 to 5	" " " " "	1,477	"
more than 5	" " " " "	75	"

11,319 prorogations were granted without any obligation on the debtors to pay any due to the creditors ; and for the remaining 10,753 prorogations the debtors paid a due varying from 1/2 to 3 per cent.

The following table gives the details of the operations :

(1) *Bank Archiv*, 16th year, No. 15.

PROROGATIONS.

		Prorogations		
		for 10 years	for less than 10 years	for an indeterminate period
<i>Interest at 1/2 %:</i>				
special dues	0 %	606	3,262	3,253
"	1/2 %	894	134	1
"	1 %	2,098	69	31
"	1 1/2 %	1,307	11	7
"	2 %	198	—	—
"	more than 2 %	95	—	—
Total		6,098	3,476	3,292
<i>Interest from 1/2 to 3/4 %:</i>				
special dues	0 %	1,361	1,292	82
"	1/2 %	365	20	—
"	1 %	2,760	33	—
"	1 1/2 %	1,152	3	—
"	2 %	574	2	—
"	more than 2 %	10	—	—
Total		6,222	1,350	82
<i>Interest from 3/4 to 5 %:</i>				
special dues	0 %	27	1,264	58
"	1/2 %	12	61	—
"	1 %	16	29	—
"	1 1/2 %	3	—	—
"	2 %	5	1	—
"	more than 2 %	1	—	—
Total		64	1,355	58
<i>Interest at more than 5 %:</i>				
special dues	0 %	1	74	—
"	1/2 %	—	—	—
"	1 %	—	—	—
"	1 1/2 %	—	—	—
"	2 %	—	—	—
"	more than 2 %	—	—	—
Total		1	74	3,432
General total		12,385	6,255	3,432
		22,072		

Part IV: Agricultural Economy in General

UNITED STATES.

INTERIOR COLONIZATION IN CALIFORNIA.

OFFICIAL SOURCE:

REPORT OF THE COMMISSION ON LAND COLONIZATION AND RURAL CREDITS OF THE STATE OF CALIFORNIA, November 29, 1916. California State Printing Office, Sacramento, 1916.

The legislature of California in 1915 passed a law providing for a commission to "investigate and consider the question of land colonization, and the various forms of land banks, co-operative credit unions and other rural credit systems adopted or proposed in this country or elsewhere, with especial view to the needs of the rural communities of this State".

Since 1910 questions of land tenure have assumed a hitherto unthought of importance in the United States. The causes for this are the disappearance of free, fertile public lands, the rising prices of privately owned farm lands, the increase of tenant farming, and the growing attractions of city life which lead young people to leave the farms.

The State of California has had no State land settlement policy but has left the matter entirely to unregulated private enterprise. There has been no public control of the selection of colonists, and no public scrutiny of the soil and conditions of purchase.

The task of the commission has been to study the methods and results of private colonization in California in recent years, and compare them with those found in other countries in which colonization is helped and directed by the State. The endeavour has been to get as much firsthand information as possible. Statements have been obtained from many settlers in nearly all parts of the State in which colonization has recently been active. Conferences with men active in matters of colonization and with interested commercial bodies have been held (1).

(1) While this investigation was in progress Congress passed the Federal Farm Loan Act. It seemed desirable therefore that the investigation should deal with methods and policies of land settlement. The benefits of the Federal Farm Loan Act are however restricted to farmers who can give first mortgage security on land worth double the amount of the loan they obtain. In order to enable tenant farmers to become owners of farms or to give adequate assistance to colonists without much capital a separate credit system must be provided. Hence the Crosser Bill.

The results of the commission's investigations have been arranged in a report, published in 1916, which we will analyse in detail (1).

§ 1. AGRICULTURAL CONDITIONS IN CALIFORNIA.

California has an immense area of fertile and unpeopled land. Only eleven million out of the twenty-eight million acres of farm land are being cultivated. Nevertheless comparatively few settlers are immigrating and many who arrived in recent years have gone away. Costly advertising and still more costly personal solicitations have failed to attract colonists. The principal causes for this arrested development seem to be the high prices of land, the high rates of interest, and the short terms which colonization contracts allow for payment. Moreover great properties, owned by nonresidents, ought to be subdivided and cultivated by residents. 310 landed proprietors own more than four million acres of land suited to intensive cultivation and capable of supporting a dense population.

The enquiry obtained the following data as to the financial condition of settlers:

Number of settlers interviewed 991; average area of a farm 37 acres; average price paid for unimproved land \$ 160 (minimum \$ 56 and maximum \$ 512); average time allowed for payment 5.8 years; average capital of settler \$ 4,814; average cost of improvements \$ 2,367 (minimum \$ 850 and maximum \$ 6,615); number of colonists still debtors 719; average amount of indebtedness \$ 2,931; average rate of interest 8 per cent. when money is furnished by a bank or privately, 6.9 per cent, when it is furnished by contract.

In the whole of California the rate of interest on deferred payments for land and money borrowed to pay for land or its improvement or stocking varies from 6 to 10 per. cent., and the time allowed for repayment from three to eight years.

The following table shows the average price per acre in 1916 of farm land in the United States.

Geographical Division	Improved Lands	Unimproved Lands
	\$	\$
North Atlantic States	64.30	38.71
South Atlantic States	38.02	23.79
North Central east of Mississippi River	100.67	74.95
North Central west of Mississippi River.	78.21	59.68
South Central	33.38	24.09
Far West	102.58	58.40
California	180.00	110.00

(1) In our issue for April 1917 we published a brief notice of this report.

As regards the prices paid by colonists in California for their lands these averaged according to their own statements \$ 190.72 an acre, according to the statements of the commercial bodies in the State \$ 260.97 an acre. The purchase price of unimproved land is, in fact, higher in California than in other parts of the United States or in countries which have a State system of land settlement.

The comparison of the price of land and conditions of land purchase in California with those obtaining elsewhere makes it seem wonderful that settlers in California pay for farms in from three to ten years while in other countries it takes them from thirty to seventy-five years to do so. The explanation is that in California the settler who has not had a large capital in cash or some outside income has not been able to buy a farm at all.

The experience of practically every colonizing company, no matter how successful, shows that it would have been better, both for the settlers and for the company, if the original enterprise had been organized on a basis which gave the settlers more money for improvements and a longer time in which to pay for their farms. The colony of Los Molinos, for example, is now a success. A majority of the settlers have overcome the obstacles which at first threatened to overwhelm them. They bargained to pay a high price for unimproved land in the short period of seven years. In addition to paying for the land they had to find money for improvements and stock, of which the cost on small irrigated farms is very heavy. The working expenses included taxes of about \$3 an acre, water charges of \$2 an acre, and interest on land of which the amount varied from \$75 to \$300 an acre. A sum between \$35 and \$40 an acre was needed in order to pay interest, principal and taxes ; and at the outset the land did not produce anything approaching this amount. Fortunately the company which founded the colony had financial resources which enabled it to help the settlers by spending \$60,000 on the purchase of cows, and allowing the settlers to pay for these by subsequently ceding half the money due to them for cream. Each settler paid 8 per cent. on the loan made to him. The following figures show the extent to which the settlers were still indebted in 1916. The 375 contracts then outstanding represented :

\$ 48,763 arrears of interest,
651,001 arrears of principal,
15,689 ledger account, and
13,446 unpaid balance on purchase of cows.

In the past men paid for land in California in five years : but the task of paying for a farm out of its products has become much harder in the last ten years. Thus when colonization began in Orland the price of land was from \$10 to \$40 an acre. The same land, unimproved, now sells for from \$75 to \$150 an acre and the water right costs an additional \$40 an acre. The lands of the Sacramento Valley Irrigation Company were bought at an average price of \$37 an acre ; but the settlers on them whom the commis-

sion interviewed paid an average price of \$130 an acre, which price included only part of the cost of necessary works of irrigation. The early settlers in Modesto and the Oakdale districts bought land for less than \$50 an acre ; but land of the same kind in these districts now sells for \$100 and \$150 an acre, in some cases for \$250 and \$300 an acre.

In fact, throughout the area of colonization the price of land has been multiplied by from two to ten, while the profits of farming have increased little if at all. Hence some years ago men who bought land at \$50 an acre could pay high interest and also free themselves from debt, while those who have bought recently have to struggle even to pay interest.

The higher prices of land have made intensive cultivation necessary, and this entails costlier improvements and equipment. The investigation of the United States census showed that while the average area of a farm diminished between 1900 and 1910, the average capital invested in it increased by 86 per cent.

The average cost of improvement and equipment also increases as the size of the farm diminishes. Even if the cost of a house and stable on a twenty acre farm is no more than it used to be on a farm of 160 acres, its average cost per acre is about eight times as great.

The estimates made by the commercial organizations show that the ultimate cost of improvements on the small intensively cultivated farms averages \$ 180 an acre.

The short time given in which to pay for land in most contracts of colonization implies a profit following on cultivation of between 20 and 25 per cent. of the cost of land and equipment. Such profits are occasionally made but they are not the rule. Investigations of the United States Department of Agriculture shows that the fully improved farm rarely pays more than 5 per cent. on the investment ; if reasonable allowance be made for the wages of the farmer and his family.

The United States Reclamation Service has kept a careful census of the yield and value of crops grown under federal projects. It reports the following as the average values of crops : \$31 an acre in 1910, \$27 an acre in 1911, \$26.60 an acre in 1912, and \$24.50 in 1913. The reductions are mainly due to the declining prices of products, and prices for the last two years are higher. The total area cultivated under various projects, namely 1,364,149.9 acres (of which 703,424 were cultivated under government reclamation projects) was found to yield a crop worth, on an average, only \$ 23.45 an acre.

In all districts exceptional single farms and single acres yielded far more than the average returns. For example single acres in Orland planted with citrus fruits have brought in \$249 each, and single acres planted with small fruits \$252 each. Single acres devoted to truck farming in Californian colonies have brought in more than \$ 100 each. But plans for payment for colonists' farms should of course be based not on exceptional instances but on averages.

The United States census gave \$43.50 an acre as the gross value of crops grown on irrigated land in California, but beginners cannot expect

to reach this average because the calculation covered the highly improved orchards and vineyards in full bearing. Alfalfa crops, which are the beginner's main dependence, had an average value of only \$22.94 an acre. Even in such industries as the growing of citrus fruits, which need a large investment in land, a long wait for returns, and exceptionally skilful and careful cultivation and marketing, the net profits over and above expenses of cultivation only average, according to a report prepared by the California Citrus Growers' Association, 4.3 per cent. on land valued at \$1,000 an acre.

Real estate agents from the overdone and less profitable fields of the Middle West flocked to California, not to develop agriculture but to exploit it. The prosperity of the settler was his own affair. The land agent's business was to make money out of him rather than to make money for him.

One agency bought about 150,000 acres at an average price of less than \$40 an acre. The average selling price was at first about \$75 but was afterwards raised to \$175 an acre. The agent's commission at the higher price was 30 per cent., so that he was paid for selling the land considerably more than it cost. On another colony an Eastern selling agency undertook to dispose of land for a commission of 20 per cent. on the selling price. No limit was placed on the price the agent could ask, so the price of farms which has been selling at \$150 an acre was raised to \$400 an acre and the agents thereby almost doubled their commissions. As by the terms of the sale one fifth of the price was paid in cash and the balance in four yearly instalments, the selling agent took all the first payment and sought to induce the settler to buy enough land to absorb all his capital in first payments. He then could pocket the whole as his commission. When the whole projected area had been sold the owner held contracts with a number of moneyless, inexperienced people who were a liability rather than an asset, while the selling agent had all the cash. It is no wonder that a manager of colonization enterprises testified to the commission that in most cases the price of land was two or three hundred per cent. higher than it should be.

The underlying causes for much of the failure of the colonizing schemes are: 1) the selection of unfit land; 2) the selection of unfit settlers; 3) ignorance, on the part of the promoters, of proper colonizing methods, and, on that of the settlers, of the crops they should grow and how and when they should plant them; 4) the excessive cost of land; 5) the insufficient capital of the settlers; 6) the excessive rates of interest on borrowed money and deferred payments; 7) the short terms allowed for payment; and 8) improper marketing facilities.

§ 2. CONCLUSIONS AND RECOMMENDATIONS.

After having made a detailed exposition of the position of agriculture in California, and having noticed all the disadvantages and abuses due to the complete liberty left to individuals as regards colonization, the commission advances, in the last part of its report, its conclusions and recommendations on which legislation should be based.

In the first place the commission considers that the State should have a land settlement policy and deal with this matter as a public problem.

In the greater part of the United States there has been little need for public supervision of rural development. The kind of crops which can be grown and the preliminary outlay they require are so restricted that little variation in methods is possible. It is otherwise in California. There much of the best land has to be irrigated, much has to be drained, and some has to be protected against floods. Every acre of irrigated land must have a right to water, and the character of such right is nearly as important as the validity of the title to the land. To prepare some areas properly for settlement involves an immense expenditure of money. It is practically impossible for an immigrant to protect himself against misrepresentation in these matters.

Water and climate, as well as soil, influence the value of agricultural land in much of California. Wherever irrigation is required plans for colonies should provide for the efficient use of streams. As the irrigated area extends and population increases, so does the demand for water increase and in like measure the struggle for its control. In great irrigable areas, like the San Joaquin and the Sacramento valleys, all agriculture will in time be bound together by a common dependence on the streams. For this reason the ultimate results will be more satisfactory if colonization is carried out in accordance with a carefully thought out plan embracing all the irrigable land in each watershed.

State supervision of colonization ought not to include ordinary sales of land among individuals but only enterprises, of sufficient magnitude to have public importance, which seek to attract settlers, unacquainted with local conditions, from a distance or from a particular neighbourhood. It should be the aim of such supervision to provide : 1) that adequate attention has been given to water supplies and drainage in irrigated areas ; 2) that the land is suited to the purposes for which it is being sold ; 3) that there is no misrepresentation in advertising. It should also aim at helping those engaged on colonization by pointing out to them features in their plan which are likely to lead to failure.

In the past settlers and land settlement have been helped by the large increase in the price of land which accompanied development. This made it possible to borrow money for improvements or to sell a part of the original purchase for nearly as much as it all cost at first. This aid must be replaced by a more generous system of personal credit and more efficient and cheaper methods of preparing farms for intensive cultivation.

The experience of other countries and of some American colonizing enterprises indicates that it is cheaper for an organization having ample capital to level and sow the land and finance the building of houses, rather than leave this work to the individual settler.

The commission makes the following suggestions as to the future financing of settlers in California :

1) They should have from twenty to thirty years in which to pay for their land ;

2) After they have made the initial payment they should be required to pay nothing further on principal for the first two years, but the selling contract should stipulate the character of the improvements they must make ;

3) The payment for land should be amortized ; and the amount of annual or semiannual payments equal throughout the period of payment.

It also seems desirable that the State should establish one or more offices in which information as to approved colonizing enterprises could be obtained. California might, like West Virginia, distribute printed lists of land held by approved enterprises, stating the conditions of settlement and what crops might be grown on them.

The commission believed that over a considerable part of America the different States will soon have made colonization a public matter. In the east this will be done to lessen tenant farming and improve agricultural practices, in the west to settle unoccupied and uncultivated land rapidly. The tendency towards the adoption of this policy in the west is shown by the decision of the United States Reclamation Service to level and improve farms before offering them for settlement ; by the introduction of and hearings on the Crosser Bill which, if enacted, will go far towards financing settlers on public lands ; and by the report of the Co-operative Land Settlement Board in Wyoming, which has recommended that the federal government build irrigation works, and the State subdivide the land, select settlers, and finance their necessary improvements. It is understood that legislation to carry these recommendations into effect is being framed.

The immense area of land in the large estates of California would make progress too slow if it depended entirely on action by the State ; but the State can do much to promote the adoption of right policies by showing on a model colony the advantages of considering real agricultural development rather than local or immediate benefits. It is suggested that for this an area of about 10,000 acres be taken, from which there would have to be deducted approximately 300 acres for roads, canals, schoolhouses and recreation grounds, and 100 acres for farms labourers' allotments and a few small orchards and gardens. There would remain 9,600 acres or enough land to provide about two hundred farms varying in size from 20 to 100 acres. If these farms were all settled by alert, ambitious young men and women the advantage to agriculture in California would be great. The value of the demonstration would be increased if no settlers were admitted who were not experienced and trained, between eighteen and thirty years old, possessed of no farm land elsewhere in the State, and able themselves to reside on and cultivate their farms. The land should be paid for in thirty-six years, the initial cash payment being 5 per cent. while interest at $4\frac{1}{2}$ per cent., and amortized annual payments of $1\frac{1}{2}$ per cent of principal should begin at the end of the fourth year, the settler paying for his land and having a clear title while he does so by paying $4\frac{1}{2}$ per cent. on the cost in the first four and 6 per cent. in the remaining thirty-two years. Each settler should be required to have enough capital to pay in cash one fourth of the cost of all improvements made by the State, the payment of the other three fourths

to be amortized and bear the same interest as payments for the land. It is believed that on these terms existing financial institutions can give whatever credit is necessary for buying stock, including dairy cows.

The selection of colonists should be entrusted to a board, and the subsequent business management to a single competent superintendent reporting to this board. The State agricultural college should systematically provide information as to farming, and the superintendent should advise as to buying live stock and equipping farms. The State should, by contract, build houses, level land for irrigation, and lend money to settlers, within a fixed maximum limit, on insurable improvements carried out under the direction and to the satisfaction of the authorities in control.

The prices of farms, after subdivision, should be so adjusted that they pay for land lost on roads and canals, interest on the cost of the land between the time of subdivision and the time of settlement, and all other incidental expenses.

The selection of the land should be entrusted to an expert committee who would buy it at its productive value. This policy would, if it were understood, be a guarantee to settlers that they were getting their money's worth. The land might be paid for with State bonds bearing interest at the rate of perhaps 4 per cent., or it might be bought under a contract by which the landowner gave deeds to the settler directly, the State guaranteeing his payments and having the right to complete the purchase and enter into full ownership at any time deemed advisable. Existing State authorities could plan the works for a water supply, subdivide the area and fix the size of farms. The amount of capital to be provided for financing the settlers could be greatly reduced by making full use of the possibilities of loans under the Federal Farm Loan Act.

FRANCE.

THE INCREASE IN AGRICULTURAL WAGES FROM 1914 TO 1916.

SOURCE :

LA MAIN-D'ŒUVRE AGRICOLE (*Agricultural Labour*), N° 216, 11th year, Paris, 10 July 1917.

The enquiry which the Ministry of Agriculture undertook among managers of agricultural departments as to agricultural wages has been concluded, and it is now possible to make use of the results obtained by the office of agricultural information within this ministry. The figures which we here reproduce show the average increase of the wages of labourers, whether fed by their employers or otherwise, the rate at which labour has decreased and the rate at which the average yield of a working day has diminished, in each department. Then for each agricultural district the average wages of labourers, whether fed by their employers or otherwise, in 1914 and in 1916 are shown; and finally the percentage of increase in the wages of labourers, fed and not fed by their employers, between 1914 and 1916; and the rate at which labour has been reduced and the average yield of a working day diminished in each district and in the whole country.

Department —	Average increase in a labourer's wages		Reduction of labour due to the war — %	Diminution of average yield of a working day — %	
	not fed by employer	fed by employer			
	%	%			
1st Agricultural District — North-West.					
Morbihan	63	100	—	30	
Finistère	50	50	60	25	
Manche	28	40	62	32	
Ille-et-Vilaine	27	25	70	4	
Côtes-du-Nord	41	50	14	15	
Orne	42	50	65	20	
Sarthe	46	60	61	36	
Calvados	42	25	80	30	
Mayenne	50	60	60	38	
	1914	1916	1914	1916	
	fr.	fr.	fr.	fr.	
Average wages in			Average %	Average %	
1st district	3.25	4.66	1.86	2.80	
Average increase. . .	43	%	50	%	
			62		24

Department	Average increase in a labourer's wages		Reduction of labour due to the war	Diminution of average yield of working day
	not fed by employer	fed by employer		
	%	%	%	%
<i>2nd Agricultural District - North.</i>				
Oise	42	56	47	30
Eure-et-Loir	46	88	60	30
Seine-et-Oise	81	95	65	35
Aisne	50	50	—	32
Seine-Inférieure . . .	70	57	40	30
Seine	33	40	70	30
Seine-et-Marne	27	25	40	20
Nord	38	43	50	28
Eure	12	25	70	—
Pas-de-Calais	45	66	50	30
Somme	42	50	60	18

	1914 fr.	1916 fr.	1914 fr.	1916 fr.	Average %	Average %
Average wages in 2nd district . . .	3.44	4.93	2.11	3.28		
Average increase. .		43 %		55 %	55	30

3rd Agricultural District - North-East.

Vosges	65	25	80	33		
Haute-Marne	25	40	60	25		
Meurthe-et-Moselle .	42	50	60	30		
Marne.	20	15	70	30		
Haut-Rhin (Belfort)	33	33	70	30		
Ardenne (1). . . .	—	—	—	—		
Aube	68	60	50	25		
Meuse (1).	—	—	—	—		
	1914	1916	1914	1916		
	fr.	fr.	fr.	fr.	Average %	Average %
Average wages of						
3rd district . . .	3.75	5.35	2.48	3.39	65	29
Average increase. .		42 %		37 %		

(1) Report not received.

Department	Average increase in a labourer's wages		Reduction of labour due to the war	Diminution of average yield of a working day
	not fed by employer	fed by employer		
	— %	— %		

4th Agricultural District — West.

Charente-Inférieure . . .	57	60	66	30
Charente	71	86	50	30
Haute-Vienne	36	50	40	40
Vienne	75	45	45	25
Deux-Sèvres	100	110	40	25
Loire-Inférieure . . .	33	57	50	30
Indre-et-Loire	—	33	95	90
Vendée	62	75	67	34
Maine-et-Loire	57	75	80	40

	1914	1916	1914	1916	Average %	Average %
	fr.	fr.	fr.	fr.	—	—
Average wages in						
4th district	3.36	5.45	2.46	4.08		
Average increase . .		62 %		65 %	59	38

5th Agricultural District — Centre.

Loir-et-Cher (Beau- ce, Perche)	78	55	55	30
Loir-et-Cher (Solo- gne)	47	63	—	—
Yonne	38	30	60	30
Cher	63	66	60	20
Creuse	28	66	60	25
Indre	42	60	60	38
Nièvre	50	40	60	40
Allier	100	100	60	40
Loiret	38	58	80	30
Puy-de-Dôme	55	66	60	35

	1914	1916	1914	1916	Average %	Average %
	fr.	fr.	fr.	fr.	—	—
Average wages in						
5th district	3.87	5.92	2.83	4.53		
Average increase . .		53 %		60 %	60	32

Department	Average increase in a labourer's wages		Reduction of labour due to the war	Diminution of average yield of a working day
	not fed by employer	fed by employer		
	%	%		

6th Agricultural District — East.

Jura	55	50	35	28
Doubs	42	60	50	20
Saône-et-Loire . . .	65	50	60	35
Côte-d'Or	33	56	60	30
Haute-Saône	33	33	98	50
Loire	65	83	—	—
Ain	55	75	70	50
Rhône	51	85	60	33
Haute-Savoie	58	75	30	20
Savoie	50	50	20	33

	1914	1916	1914	1916	Average %	Average %
	fr.	fr.	fr.	fr.		
Average wages in						
6th district . . .	3.43	5.15	2.14	3.46		
Average increase. .		50 %		61 %	54	34

7th Agricultural District — South-West.

Landes	63	50	75	28
Ariège	40	66	60	25
Basses-Pyrénées . .	80	83	62	13
Hautes-Pyrénées . .	50	50	40	22
Tarn-et-Garonne . .	43	64	55	30
Haute-Garonne . . .	77	62	40	40
Gers	46	53	54	34
Dordogne	62	50	50	50
Lot-et-Garonne . . .	75	75	98	—
Gironde	30	—	66	33

	1914	1916	1914	1916	Average %	Average %
	fr.	fr.	fr.	fr.		
Average wages in						
7th district . . .	2.87	4.51	1.56	2.53		
Average increase. .		57 %		62 %	59	30

Department	Average increase in a labourer's wages		Reduction of labour due to the war	Diminution of average yield of a working day
	not fed by employer	fed by employer		
—	—	—	—	—
%	%	%	%	%

8th Agricultural District — South.

Aveyron	62	65	50	25
Pyrénées-Orientales.	32	43	25	20
Cantal	—	—	75	50
Lozère	42	50	60	20
Lot	66	100	65	25
Hérault	52	77	60	12
Aude	50	60	30	25
Corrèze (1)	—	—	—	—
Tarn	50	66	60	60
	<div style="display: flex; justify-content: space-around;"> 19141916 </div>			
	fr.	fr.	fr.	fr.
Average wages in				
8th district . . .	3.46	5.19	2.29	3.83
Average increase. .	50 %		67 %	
			Average %	Average %
			53	29

9th Agricultural District — South-East.

Ardèche	38	40	60	33
Var.	33	25	60	18
Haute-Loire	33	60	60	25
Vaucluse	66	100	70	60
Bouches-du-Rhône .	50	42	55	20
Isère	100	100	60	30
Gard	42	42	45	30
Hautes-Alpes	50	60	20	—
Drôme	66	70	65	20
Basses-Alpes	42	75	60	30
Alpes-Maritimes . . .	38	—	60	10
	<div style="display: flex; justify-content: space-around;"> 19141916 </div>			
	fr.	fr.	fr.	fr.
Average wages in				
9th district . . .	3.42	5.15	2.34	3.77
Average increase. .	50 %		61 %	
			Average %	Average %
			55	25

(1) Report not received.

*Average Increase of Wages in each District and in all France
from 1914 to 1916.*

Agricultural districts	Labourer's average wages			
	not fed by employer		fed by employer	
	1914 fr.	1916 fr.	1914 fr.	1916 fr.
1st District	3.25	4.66	1.86	2.80
2nd District	3.44	4.93	2.11	3.28
3rd District	3.75	5.35	2.48	3.39
4th District	3.36	5.45	2.46	4.08
5th District	3.87	5.92	2.83	4.53
6th District	3.43	5.15	2.14	3.46
7th District	2.87	4.51	1.56	2.53
8th District	3.46	5.19	2.29	3.83
9th District	3.42	5.15	2.34	3.77
Average agricultural wages in all France	3.43	5.15	2.23	3.52

Agricultural districts	Average percentage of increase in a labourer's wages	
	fed by employer	not fed by employer
	1914-1916	1914-1916
1st District	43	50
2nd District	43	55
3rd District	42	37
4th District	62	65
5th District	53	60
6th District	50	61
7th District	57	62
8th District	50	67
9th District	50	61
General average percentage of increase	50	57.5

Average Reduction for all France of Labour and Yield.

Agricultural districts	Percentage	of diminution of yield of a working day
	of reduction of labour due to the war	
1st District	62	24
2nd District	55	30
3rd District	65	29
4th District	59	38
5th District	60	32
6th District	54	34
7th District	59	30
8th District	53	29
9th District	55	25
General average	58	30

GREAT BRITAIN AND IRELAND.

RATES OF CASH WAGES OF AGRICULTURAL LABOURERS IN ENGLAND AND WALES.

OFFICIAL SOURCE:

THE LABOUR GAZETTE, Vol. XXV, No. 7, London, July 1917.

Information is obtained annually from the chairmen or clerks of a large number of Rural District Councils showing the rates of cash wages most generally paid to the various classes of agricultural labourers not provided with board or lodging (1) in the rural district areas. Such rates, while by no means representing the labourers' total earnings, are useful as a means of comparing one year with another, and in the table below a comparison is made between the weekly rates paid in January 1914 and in January 1917. This period covers seven months prior to the outbreak of war but as the movement in wages between January and August of 1914 was relatively very small, the rates for January 1914 can be regarded as being substantially those prevalent immediately before the war.

The figures in the table show the *means* of the rates given for those rural districts in each country from which information has been received for both January 1914 and January 1917, and they cover over 80 per cent. of the total number of rural districts in England and Wales. As has been said, these rates do not represent total earnings but are only the nominal rates of weekly wages. To arrive at the total wages it would be necessary to add the value of allowances in kind, such as a free house, a potato ground, milk, etc., and the extra cash earnings from piece work, overtime, special harvest payments and in the case of men in charge of animals, such sources as journey money, bonuses for calves reared and lamb money. These vary on different farms and in individual cases, and the necessary particulars can only be ascertained by enquiries on a large scale addressed to individual families in every part of the country. Enquiries of this kind were last undertaken in 1907. A further enquiry was projected for the autumn of 1914 but was interrupted by the war.

(1) In certain of the Welsh districts a considerable number of the ordinary agricultural labourers are provided with food on weekdays but with no lodging. Particulars are given in the second table.

According to the statistics published by the Board of Trade in the report as to earnings and hours of labour in agriculture in 1907 (Cd. 5460), which were based on returns received directly from individual farmers, the average value of the extra earnings in cash and kind generally varied from about 2s. to about 4s. a week. So far as the Board of Trade is aware they had not altered to any considerable extent up to the outbreak of war. As is explained below, however, their value has probably since appreciated considerably.

If the cash rates in each county for ordinary labourers not provided with food be taken for purposes of comparison, it will be seen that their greatest increase between January 1914 and January 1917 took place in England in Durham (8s. 1d. a week), and in Wales in Flint and Merioneth (8s. 6d. a week). The county in which the increase was least was in England Hereford (4s. 2d. a week) and in Wales Cardigan (3s. 8d. a week). In only seven counties in England and Wales did the increase amount to less than 5 s. a week; in twelve it was 5s. or between 5s. and 6s., in eighteen 6s. or between 6s. and 7s., in eight 7s. or between 7s. and 8s., and in five more than 8s. a week. These figures do not concern Westmoreland and Anglesey from which only information insufficient for statistical purposes was received.

In addition to the increases in weekly rates of cash wages, shown by the table, the increase in extra earnings must be borne in mind. It is impossible with the information which is available to indicate the amount of this latter increase, but it may be pointed out that the present higher prices must have increased the value of most allowances in kind. In some cases they have also been increased in quantity. There is also evidence of the increase of piece-work rates and harvest wages. A correspondent in Essex states that piece-work rates in that county in 1916 were from 25 to 50 per cent. higher than before the war. In Norfolk it is the custom to pay labourers a lump sum for the harvest and this usually amounted to £7 or £7.10s. before the war, but in 1916 its minimum amount was £9.5s. Payments for overtime have also increased considerably during the war, owing mainly to the shortage of labour and to some extent to the introduction of the Day-light Saving Act.

Since January 1917, the date to which the latest available returns refer, the wages of the workers on the land are known to have increased, owing partly to the scarcity of labour and partly to the rise in the cost of living.

*Comparison of Mean of Weekly Rates of Cash Wages paid in January 1914
and in January 1917 (1).*

A. — England.

County	Ordinary Labourers (not provided with food)			Horsemen (not provided with food)			Cattlemen (not provided with food)			Shepherds (not provided with food)		
	Number of districts making returns	January		Number of districts making returns	January		Number of districts making returns	January		Number of districts making returns	January	
		1914	1917		1914	1917		1914	1917		1914	1917
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
<i>Northern Counties:</i>												
Northumberland . . .	6	21 0	27 5	9	20 4	28 5	8	20 1	27 9	9	20 11	27 9
Durham	7	20 9	28 10	14	20 10	29 9	8	20 5	28 11	6	20 11	29 2
Cumberland	5	18 11	25 1	5	20 7	27 2	4	20 6	26 11	3	20 4	25 8
Westmorland	*	—	—	*	—	—	*	—	—	*	—	—
<i>Yorkshire, Lancashire and Cheshire:</i>												
Yorkshire (East Riding). .	10	18 2	25 4	7	19 3	26 11	9	19 2	26 9	9	19 7	27 3
" (North Riding) . .	14	18 3	24 10	16	19 6	27 1	16	19 5	26 8	13	19 5	27 2
" (West Riding) . .	23	18 10	25 8	24	20 10	28 0	23	19 9	26 11	20	20 4	28 0
" (Whole county) . .	47	18 6	25 4	47	20 2	27 6	48	19 6	26 10	42	19 11	27 7
Lancashire	13	20 5	27 7	15	22 9	29 10	14	21 9	28 10	5	21 2	31 10
Cheshire	11	18 9	25 4	10	20 3	27 7	10	19 11	26 10	5	19 8	26 6
<i>North and West Midland Counties:</i>												
Leicestershire	12	17 2	25 2	12	19 4	26 5	12	19 0	26 0	11	19 4	26 7
Rutland	2	15 6	22 6	2	17 0	24 0	2	16 0	22 6	2	16 6	22 6
Lincolnshire	16	16 6	24 2	16	15 10	22 11	18	15 10	22 6	18	16 2	23 4
Nottinghamshire	7	18 3	24 7	7	19 11	27 3	7	19 8	26 11	7	20 1	27 6
Derbyshire	10	20 1	27 3	10	21 8	28 7	10	20 11	27 11	7	20 11	27 3
Gloucestershire	15	15 1	20 7	16	16 9	22 7	16	16 5	22 6	15	16 6	22 5

Warwickshire	13	15 11	21 11	13	17 8	24 1	13	17 6	23 8	13	17 3	23 5
<i>South Midland and Eastern Counties:</i>												
Middlesex	3	20 4	27 4	3	21 4	29 8	3	21 8	29 8	3	21 4	29 4
Hertfordshire	11	15 3	20 5	11	17 6	23 4	10	17 5	23 2	11	18 1	23 1
Buckinghamshire	7	14 8	21 3	7	16 7	24 0	7	16 7	24 4	7	16 6	24 5
Oxfordshire	9	13 0	19 4	9	14 11	22 3	8	14 10	22 1	8	14 11	21 11
Northamptonshire	15	15 5	21 1	15	17 5	24 0	15	16 8	23 2	14	16 11	23 0
Huntingdonshire	4	14 3	21 9	4	17 0	23 9	4	16 5	23 6	3	17 4	23 4
Bedfordshire	6	15 0	21 3	6	17 7	24 5	6	17 5	24 4	5	17 7	23 7
Cambridgeshire	6	14 8	22 1	6	15 10	22 9	5	15 10	22 8	5	16 10	23 7
Essex	15	14 8	22 4	16	16 8	23 11	16	16 11	23 8	13	17 0	24 0
Suffolk	16	13 7	20 0	16	15 7	22 1	16	15 5	22 0	16	16 0	22 2
Norfolk	18	14 0	22 0	18	15 11	24 0	18	16 0	24 6	11	16 2	23 9
<i>South-Eastern Counties:</i>												
Surrey	7	17 0	22 3	7	17 11	22 9	7	18 3	23 8	7	18 3	23 1
Kent	20	17 7	23 0	19	19 3	25 5	18	19 0	25 0	19	19 10	25 4
Sussex	13	15 1	21 10	12	17 5	23 7	12	17 5	23 3	9	17 11	23 3
Hampshire	21	14 5	20 2	20	15 9	22 0	20	16 2	22 2	19	16 3	22 4
Berkshire	7	14 6	19 6	7	15 5	21 10	7	16 1	22 3	7	15 7	22 3
<i>South-Western Counties:</i>												
Wiltshire	16	14 3	20 6	16	15 9	22 8	16	16 0	22 11	16	16 1	22 9
Dorsetshire	11	12 10	17 8	10	13 10	19 4	10	14 2	19 11	10	14 4	20 2
Devonshire	13	13 11	18 2	13	14 10	19 2	12	15 2	19 5	11	15 2	19 10
Cornwall	12	16 7	21 1	11	17 3	21 2	11	17 3	21 4	6	17 6	21 8
Somersetshire	12	15 4	20 5	11	16 4	21 6	11	16 4	21 5	8	16 1	22 0

(1) The rates stated are exclusive of extra earnings and allowances in kind. Some of the variations in cash rates are due to the variations in the value of these extra earnings and allowances in different counties and districts.

* Data insufficient for statistical purposes.

*Comparison of Mean of Weekly Rates of Cash Wages paid in January 1914
and in January 1917 (1)*

B. — Wales.

County	Ordinary labourers not provided with food			Ordinary labourers provided with food			Horsemen and cattlemen not provided with food			Shepherds not provided with food		
	Number of districts making returns	January		Number of districts making returns	January		Number of districts making returns	January		Number of districts making returns	January	
		1914	1917		1914	1917		1914	1916		1914	1917
Flintshire	4	17 9	26 3	*	—	—	3	19 10	27 2	*	—	—
Denbighshire	6	18 6	25 4	7	10 8	15 7	5	18 1	25 1	*	—	—
Carmarvonshire	3	20 0	24 8	2	12 0	14 6	3	19 2	24 10	*	—	—
Anglesey	*	—	—	2	11 0	15 6	2	17 9	24 3	*	—	—
Merionethshire	2	17 9	26 3	2	10 6	18 3	*	—	—	*	—	—
Montgomeryshire	4	16 8	22 9	4	10 8	15 2	*	—	—	*	—	—
Cardiganshire	3	16 4	20 0	4	12 11	15 0	*	—	—	*	—	—
Radnorshire	5	15 0	20 1	4	10 3	14 6	4	14 6	20 6	3	15 4	19 8
Brecknockshire	4	17 11	23 3	3	13 2	17 4	3	17 10	22 4	3	20 2	24 4
Carmarthenshire	5	17 10	23 6	4	11 8	17 4	*	—	—	*	—	—
Pembrokeshire	4	16 8	21 0	4	11 0	15 9	*	—	—	*	—	—
Glamorganshire	5	20 2	27 10	5	14 8	17 10	4	20 9	28 9	3	19 8	26 4

(1) The rates stated are exclusive of extra earnings and allowances in kind. Some of the variations in cash rates are due to the variations in the value of those extra earnings and allowances in different counties and districts.

* Data insufficient for statistical purposes.

MISCELLANEOUS INFORMATION RELATING TO AGRICULTURAL ECONOMY IN GENERAL, IN VARIOUS COUNTRIES.

FRANCE.

THE RESTORATION OF AGRICULTURE IN THE INVADED DEPARTMENTS. - *La Main-d'œuvre agricole (Agricultural Labour)*, No. 217, 14th year, Paris, 25 July 1917.

On 30 June 1917 the Direction of Agriculture in the Ministry of Agriculture published, with a view to agricultural reconstruction in the invaded departments, instructions to which agriculturists should conform in order to resume occupation of their former farms. It is a fact that the resumption of agricultural life in these districts ought to be accomplished as soon as possible by the agricultural population still in them, the repatriated agriculturists, and those who have withdrawn into the interior and will now ask to return to their villages. But the stretch of land in question forms a so-called "reserved" zone of which the limits have been fixed by the military authority. Owing to the devastated condition of many places and for military reasons no general measure authorizing an immediate and collective repatriation can be passed. For the moment therefore leave to return can only be granted individually to agriculturists who previously resided habitually in the commune to which they ask to go, and whose return is recognized to be indispensable to the resumption of agricultural life. In his request an agriculturist should always indicate what is the importance of his farm and how he proposes to resume farming. Authorizations can be granted only in the measure of which the condition of communes, as regards means of access to them, their provisioning and the degree to which they are healthy, habitable and safe, permits. In every case a regular authorization will be the *sine qua non* of return.

The majority of the agriculturists will have to reconstitute their farms after their return, often building a temporary dwelling for themselves and shelters for their beasts; and always they will have to get together again their live and other stock and resume cultivation.

Since no one system of farming can be adapted to every kind of farm, each individual should determine on his best course in accordance with his ability and resources. Generally speaking, however, a garden should first be remade; then those foodstuffs which supply the first needs of man and beast — potatoes and other vegetables, forage, oats — should be planted, and finally the land should be restored to a condition allowing corn to be grown. The complete realization of the plan of cultivation will necessarily occupy several years, and depend on resources in labour and money and on the payment of indemnities for damages wrought by the war. In many cases an association of agriculturists will increase their credit and will encou-

rage the rapid resumption of agricultural life by giving solidarity to individual efforts.

For the reconstitution of dwellings in cases of urgency a special department has been instituted in the prefectorate of every department affected either in the past or the present by the invasion.

Even before the valuation of damages due to the war, urgent repairs of slightly damaged houses may be effected if the owner's poverty disable him from himself making the necessary repairs, of which the cost should not on principle surpass a fifth part of the value of the real estate before the war.

Bituminous cardboard and oiled cloth will be supplied gratis and axes lent for the purpose of preserving partially destroyed buildings and preventing the extension of damage.

Further, depots have been constituted of material which will facilitate the reconstruction in cases of urgency of dwellings by the persons interested. A single applicant may receive material of this sort up to the value of 1500 francs.

When real estate has been completely destroyed, and the previous occupiers thereof cannot find other temporary lodgings in the commune to which they have been authorized to return, they may ask for the grant of a temporary house, indicating the site on which they wish it to be erected and the number of members in their family. To meet such a demand the administration has caused stocks of temporary houses and collapsible shelters, which can be set up rapidly, to be constructed.

The first temporary shelters to be grouped in a devastated commune form the local receiving place for the repatriated refugees. They must consist of a series of houses destined from the beginning of the enterprise of repatriation for most urgent needs — a mayoralty and public offices, a relief station, a canteen and station for provisions, a reserve of furniture — in order to secure indispensable living conditions to those who have suffered losses in the communes in which destruction has been such that they have not been able to find shelter in the remaining houses.

In order, however, to enable the resumption of normal life or any agriculture a special department for bringing back the soil into a cultivable state must destroy bombs, level trenches, and remove wire entanglements.

Capital and stock are also necessary to the resumption of agricultural life. On principle money on account or advances on indemnities for war damages can only be granted if the cantonal commission, anticipated by article 4 of the decree of 20 July 1915, has testified to the damages and estimated them. Immediate advances, for bringing the land again under cultivation or harvesting crops, may however be made, by the medium of the prefect and agricultural departments of a department, to persons who have incurred loss where the estimating commission has not been able to exercise its functions. These advances consist of seeds, fertilizers, agricultural implements, draught animals and live stock.

Every application for an advance of this kind should indicate the extent of land to be cultivated, the kind of land, and the manner in which it

is divided into arable, meadow and grass-land. It should also state whether the petitioner is a landowner or a leaseholder, and what live stock he kept before the war.

Purchasing commissions have been appointed in each department to buy live stock, seeds and agricultural machinery. As gradually the goods so purchased are distributed their value is entered on account, and will be deducted from the indemnities due for war losses. These accounts are only granted to such of the persons who have incurred loss as need to benefit by the distributions. They are not granted to any persons, however great may be their losses, who are able to wait for the settlement which will follow on the enactment of the law.

GERMANY.

THE ACTIVITY OF THE ROYAL COMMISSION OF COLONIZATION FOR WEST PRUSSIA AND POSNANIA IN 1916. — *Die Tätigkeit der Königlichen Ansiedlungskommission für Westpreussen und Posen im Jahre 1916*, in *Archiv für innere Kolonisation*, Vol. IX, Part 8, Year 1916-1917, Berlin, May 1917.

The Royal Commission of Colonization for West Prussia and Posnania has continued to exercise the activity which was the object of its foundation in spite of difficulties of every sort due to the duration of the war; but it has limited itself to undertaking strictly necessary business.

Twice as many properties have been offered to it as in 1915, but it has made purchases only in the interests of new German properties, that is to say when it was a matter of strengthening the position of these by uniting neighbouring lands to them. In one case however the decision was made to buy a property for no immediate reason but in order to help the *Breslauer Beamten Spar- und Darlehnskassen Vereins* (The Savings and Loans Funds of the Union of Breslau Officials) to make reimbursements to a considerable number of its depositors. The commission made seven new acquisitions, including one *Rittergut*, two State domains and two large peasants' properties. The total area acquired was 2,255 hectares (1).

The Commission received more numerous applications to purchase than in 1915, in all 2,200 as compared with 559 in that year. Of these 2,200 there were 655 which emanated from the armies and to these must be added some hundreds coming from workmen in Berlin and its neighbourhood. Only 21 transactions which concerned *Rentengüter* were concluded and of them only thirteen were finally made valid. Of the thirteen purchasers involved, five came from the west and south of Germany, six from West Prussia and Posnania and two from abroad. The newly formed properties have an area of 165.45 hectares and represent a value of 257,600 marks (2); that is to say that each has on an average an extent of 12.72 hectares and a value of 19,815 marks. The ratio of actual purchases to applications is

(1) 1 hectare = 2.47 acres.

(2) 1 mark = about 11 3/4 d. at par.

somewhat low; the reason for this being that many applications were in fact mere requests for information from correspondents in the armies who wished, above all, to know on what terms they could become settlers after the war.

But obstacles were constituted especially by the insufficiency of building materials and the high prices of such as could be obtained, to say nothing of the lack of labour for the building necessary to new farms and of animals for transport and labour. It was also very difficult to procure live stock and the right quantities of goods necessary to a farm, and when they were obtainable they were dear. This almost impossibility of accomplishing essential building on farms will prevent the extension of colonization for some time longer. It is thought that the difficulty may be met by erecting only modest buildings which can be used provisionally, for the economic strength of a settler must not be imperilled by suffering him to incur too heavy charges through the buildings on his farm.

At the end of 1916 the Commission of Colonization had ceded 19,557 properties to be paid for by annual instalments, and 2,170 on lease, that is a total of 21,727 settlers' holdings. Of the leasehold settlers' holdings recently formed 103 have not changed their condition, but the form of the others has been altered so that they are now being bought by annual instalments. The 21,727 holdings are distributed as follows, according to the origin of the settlers occupying them:

5,736	or	26.4	%	—	settlers	emanating	from	provinces	to	be	colonized;
10,555	"	48.6	"	"	"	"	"	"	"	"	other parts of Germany;
5,436	"	25.0	"	"	"	"	"	"	"	"	abroad.

The stock of land of which the Commission of Colonization disposed at the end of 1916 extended to 59,172 hectares; and this could yield 30,100 hectares of colonizable land on which about 2,500 settlers' holdings could be formed.

Since it has come into existence 308,984 hectares have been ceded to the commission under the law on colonization: 31,375 hectares have been employed on objects of public utility, such as roads, the sites of churches and schools; 52,497 hectares have been sold to the State domains, the State forest administration and persons other than settlers; and 9,675 hectares have been reserved to serve as adjuncts to land already colonized or as building sites. Out of a total area of 461,633 hectares, 402,531 hectares or 87.2 per cent. have thus been employed for purposes other than colonization.

In 1916 no new plans for colonization were drawn up.

As to the commission's building activity this has purposely been kept within modest limits. Efforts have been almost confined to the erection of buildings on the properties to be paid for by annual instalments or held on lease. As regards new buildings we have to notice only three, constructed for objects of public utility, which cost 68,500 marks, and fifty-two built for individuals at a cost of 664,500 marks. The total expenditure on build-

ings was thus 733,000 marks. The new building of churches, schools and presbyteries, begun in 1914, has been interrupted.

Works executed for the improvement of the soil have also been of diminished importance. 167 hectares of cultivable land were drained and 209 hectares of cultivated marshy and meadowland improved; and 6,535 metres (1) of roads mended with stones or paved. Moreover 700 hectares of marshy land were redeemed, being converted into meadows.

The stock of settlers has been improved by a distribution of pedigree bulls and sheep for purposes of breeding. Moreover twenty-four cows and heifers and three draught-oxen have been sold to them, the animals emanating from the live stock reserves of the colonized holdings or being bought with the funds intended for the development of bull depositories in the colonization communes.

Much more attention has been paid than in the previous year to trees bearing fruit or otherwise usefully productive. In 302 colonists' gardens, along roads of communication and in the village pasture grounds, 12,026 fruit-trees have been planted as against 6,841 in the preceding year, 412 nut trees as against 151; 1,859 forest and ornamental saplings as against 947, and 2,349 saplings for hedges as against 264. The settlers have also formed seven model fruit-tree plantations containing 379 saplings. To care for the trees thirteen settlers and settlers' sons have been trained and eleven of them have already been engaged by contract. Hitherto as many as 170 have been trained and 111 of these are following the trade of forestry. As regards the protection of birds 604 nestfuls have been brought up artificially in thirty-six colonization villages in West Prussia and thirty in Posenania.

The economic position of the settlers has improved since 1915. The price of agricultural products has increased; the women have come to understand rural economy better; and many settlers have obtained leave on economic grounds. While in the preceding year 1887 prorogations of payment had to be granted there were only 1100 of them in 1916. The total sums remaining to be paid out of a capital of 12,000,000 marks passed between these two years from 500,000 to 425,000 marks. Everything possible has indeed been done to bring back the colonies to their normal circumstances; and the whole merit attaching to the value of these farms is understood when it is seen that during this year they were granted, always in the measure which was possible, the labour of a certain number of prisoners of war and the right to employ the necessary draught-animals; while 7,861 settlers, 9,383 sons and other members of the families of settlers, and 2,666 employees — in all 19,910 labouring men, were suffered to return to the farms.

The colonists' holdings have to some extent changed hands, either owing to the war or for other reasons. The number of holdings sold or let has risen from 78 to 109. Sixteen farms had to be sold by auction, but their occupiers had shown themselves to be bad managers before the war. In

(1) 1 metre = 1 yard 3.371 inches.

a few cases an additional cause for the auction was a lack of means which did not allow farming to be continued.

During the year 1 July 1915 — 1 July 1916 the commission administered (1) 230 individual properties and farms, extending over 111,636 hectares, of which 126 extending over 57,584 hectares were large farms. The other 104, extending over 54,052 hectares, have ceased to be administered by the commission which has remitted them to settlers.

At the end of the year 1915-1916 (July) 672 holdings, having a total area of 293,618 hectares, ceased to be directly administered by the commission.

In 1915-1916 cereals were sold for 6,510,437 marks; potatoes, sugar beetroot and live and other stock represented on 30 June 1916 a value of 7,075,800 marks as against 6,458,000 marks in the preceding year, that is to say it had increased by 617,800 marks.

At the end of 1916 the Commission of Colonization had at its disposal 176,126,537 marks; namely 95,836,230 marks for colonization properly so called, and 80,287,307 marks for the consolidation of peasant property and of large property in West Prussia and in Posnanian.

REGENCY OF TUNIS.

THE SOCIETY OF THE FRENCH FARMS OF TUNISIA DURING THE WAR. —
L'Économiste français (*The French Economist*), 45th year, No. 31, Paris, 4 August 1917.

In our issue for January 1912 we gave sufficiently detailed information as to this colonizing enterprise. We wish now merely to recal that its success is due to its encouragement of the conversion of the European wage-earning labourer into a *métayer*.

In spite of difficulties due to the war the balance-sheet showed on 31 December 1916 a profit of 231,872 francs. The society which has a capital of 2,250,000 francs, has continued rapidly to improve the value of the three rural properties registered as its real estate. They have a total area of 22,000 hectares (2) and in 1916 covered their own farming costs and furnished a part of the interest on the invested capital. But the continuation of the war has multiplied difficulties. Several agents were mobilized in 1916, and labour has become much dearer because Tunisia has sent to France several thousands of native labourers and soldiers. On the other hand there has been compensation for these disadvantages, in the high prices of agricultural products.

The following table allows of a comparison between the annual profit from the society's three chief sources of revenue in the last four years :

(1) Cf. our issue for December 1912, *Bulletin mensuel des Institutions Économiques et Sociales* 4th year, vol. 25, pp. 157 et seq.

(2) 1 hectare = 2.47 acres.

	1913	1914	1915	1916
Saint Cyprien	87,149	*39,748	184,887	154,540
Munchar	39,310	68,967	42,575	71,660
Business of real estate and industrial business . . .	146,991	224,590	112,252	78,484

We should mention that the profits of 1916 would have been yet more considerable if the prices of barley and oats had not been fixed at less by from 5 to 7 francs a quintal (1) than the official prices in France. The selling prices of wine were less by from 30 to 35 francs a hectolitre (2) than those which obtained in the south of France. The prohibition on principle of the export of wines, and the difficulties of sea transport and of land transport in France, were chief causes of this difference in value.

Of the 22,000 hectares of the three domains comprised under the heading "business of real estate", about 15,000 can be brought under regular cultivation within a relatively short time. These vast spaces can be utilized rapidly especially for stock farming: the pasture lands supported by the natural prairies, used either for hay or grazing, offer in Tunisia considerable resources which can be improved by special arrangements. The cultivation of cereals or artificial forage, at the price of longer efforts and a larger investment of capital, should take a second place, and new areas should be ploughed only when prudence is exercised and sufficient preparations are made. Agricultural hydraulic works, notably the projected Medjerdah canal, will allow water to be obtained for watering animals and irrigating hundreds of hectares.

The credit balance shown on the profit and loss account, together with the sums carried over from previous years, gives a total available sum of about 323,200 francs, employed as follows: legal reserve 5 per cent. — 9,800 francs; quotas due in virtue of by-laws and contracts — 35,000 francs; various redemption payments 30,000 francs; dividend on shares (25 francs on each title) 75,000 francs. After various allocations in accordance with the by-laws the sum of 98,750 francs was carried over to the year 1917.

To conclude: the society of the French Farms of Tunisia has triumphed over difficulties determined by the general situation. After having made the progress of its undertakings secure it has continued to improve the value of its property by works of irrigation, the formation of new flocks and herds, the plantation of vines, thus taking an important step towards carrying out its programme which consists essentially in the development of agricultural production.

* Deficit.

(1) 1 quintal = 220 lbs.

(2) 1 hectolitre = 21.9 gallons.

UNITED STATES.

THE RISE IN THE VALUE OF IMPROVED FARM LAND. — *The Annalist*, Vol. 9,
No. 223, New York, 23 April 1917.

While reclamation has been adding hundreds of thousands of acres to the fertile land of the United States, the value of the land under cultivation, including the improved farm land, has been rising rapidly. Since 1912 the value of improved farm land in California has advanced to an average of \$200 an acre, an increase of \$93. This represents the extreme limit of the advance; California has superseded Illinois as the State in which improved farm land has the highest average value. Improved farm land in Illinois now has an average value of \$140 and acre, as compared with \$119 in 1912. The lowest increase in average value is \$1 an acre, and this is recorded for South Carolina and for Wyoming. In only three States of the Union has there been a decrease in average value, namely one of \$1 an acre in Colorado and Montana and one of \$2 an acre in Louisiana.

Other changes are shown in the following table, compiled from figures issued by the Department of Agriculture.

States	Value per Acre of Improved Farm Land.			Increase per Acre between 1912 and 1917
	1917	1916	1912	
	\$	\$	\$	—
Maine.	41	37	36	5
New Hampshire	40	38	34	6
Vermont	44	40	34	10
Massachussets	76	75	66	10
Rhode Island	85	100	60	25
Connecticut	62	62	55	7
New York.	72	67	65	7
New Jersey	105	100	93	12
Pensylvania	72	65	53	19
Delaware	73	64	60	13
Maryland	65	60	42	23
Virginia	45	42	34	11
West Virginia	42.50	39	32	10.50
North Carolina.	42.50	37	28	14.50
South Carolina	35	32	34	1
Georgia	30	28	26	4
Florida	55	52	45	10
Ohio	95.50	91	77	18.50
Indiana	103	98	82	21
Illinois	140	130	119	21
Michigan	70	65	54	16
Wisconsin	95	90	63	32

States	Value per Acre of Improved Farm Land.			Increase per Acre between 1912 and 1917
	1917 \$	1916 \$	1912 \$	
Minnesota	83	75	56	27
Iowa	156	153	106	50
Missouri	69	65	54	15
North Dakota	39	37	30	9
South Dakota	63	60	48	15
Nebraska	80	76	74	6
Kansas	60	58	53	7
Kentucky	47.50	41	33	14.50
Tennessee	46	42	33	13
Alabama	21	20	19	2
Mississippi	25	23	20	5
Louisiana	33	27	35	2 *
Texas	45	39	36	9
Oklahoma	35	31	29	6
Arkansas	32	27	24	8
Montana	35	34	36	1 *
Wyoming	33	33	32	1
Colorado	62	60	66	4 *
New Mexico	50	45	48	2
Arizona	105	80	80	25
Utah	105	90	80	25
Nevada	90	85	70	20
Idaho	71	64	66	5
Washington	100	102	100	—
Oregon	82	70	75	7
California	200	180	107	93

* Decrease.

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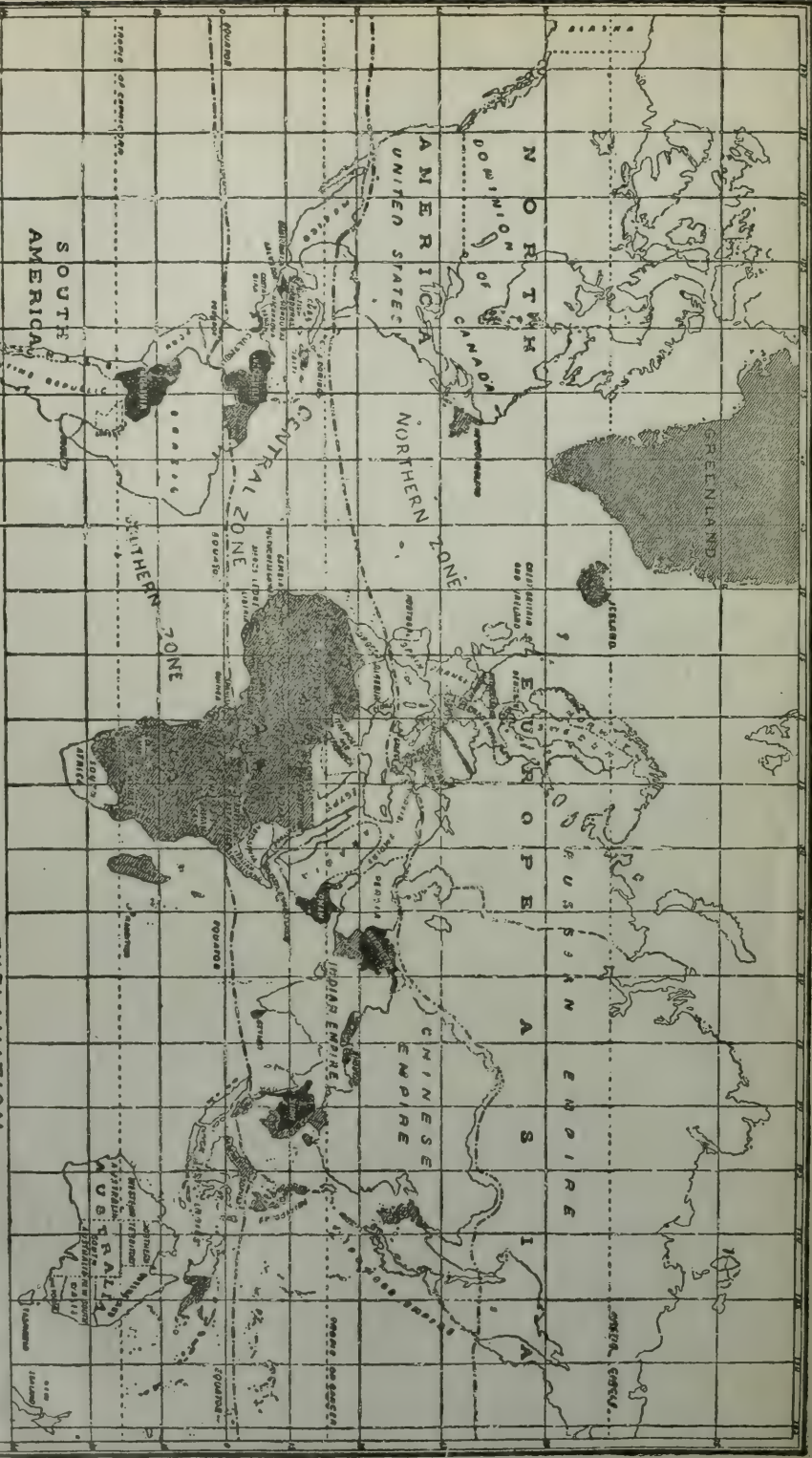
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


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-  Non adhering Countries.
-  Line showing geographical zones established by the Institute in order to facilitate the collection of statistics.
-  Colonies and Protectorates of the adhering Countries.

INTERNATIONAL INSTITUTE OF AGRICULTURE
BUREAU OF ECONOMIC AND SOCIAL INTELLIGENCE

INTERNATIONAL REVIEW OF AGRICULTURAL ECONOMICS

(MONTHLY BULLETIN OF ECONOMIC
AND SOCIAL INTELLIGENCE)

VOLUME LXXXII.
8TH. YEAR: NUMBER 10
OCTOBER, 1917.



ROME
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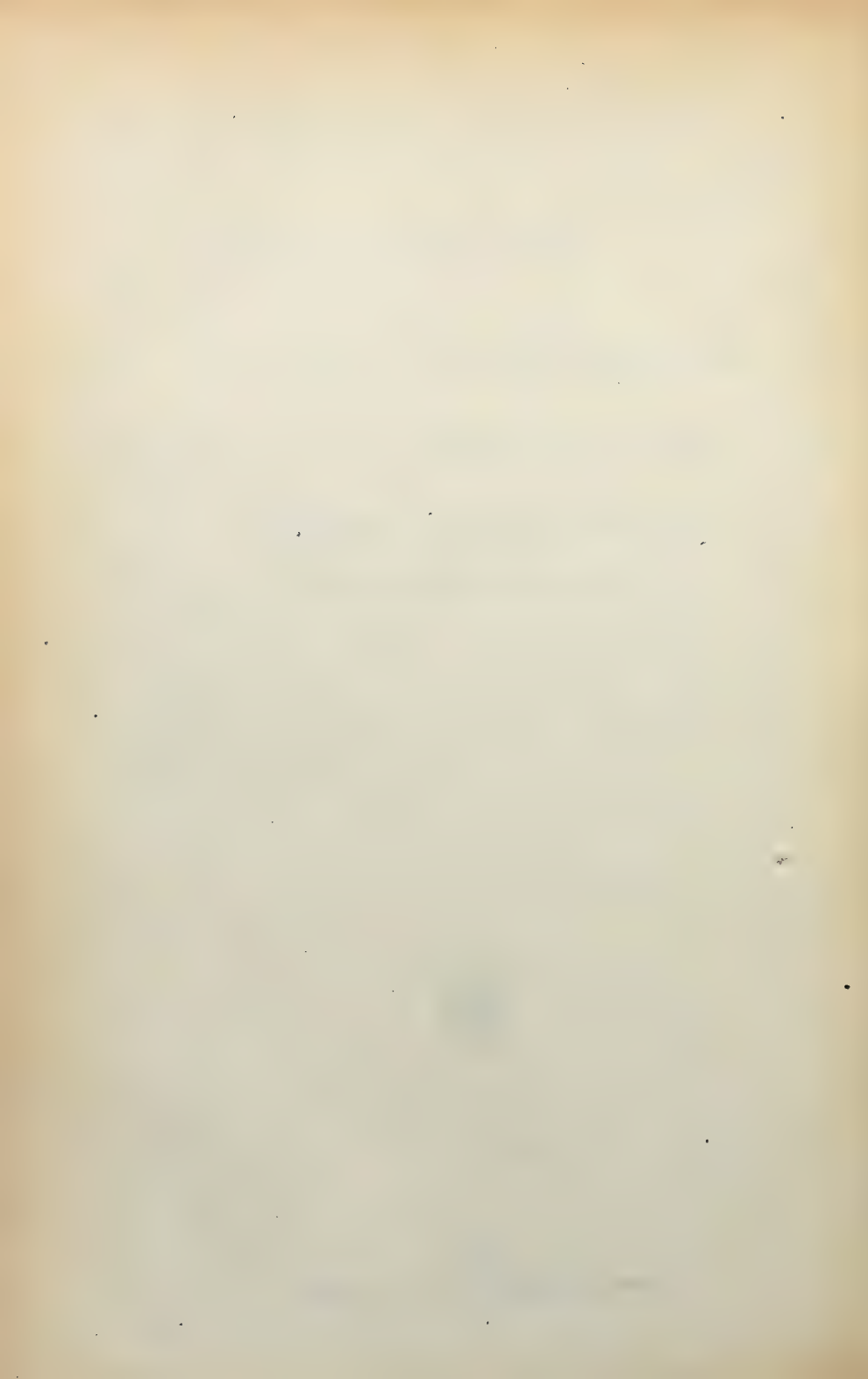
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Part I: Co-operation and Association

CANADA.

THE CO-OPERATIVE MARKETING OF AGRICULTURAL PRODUCE.

OFFICIAL SOURCES:

CUMMING (M.), Secretary for Agriculture in NOVA SCOTIA ; BELANGER (E.) of the *Journal d'agriculture* of QUEBEC ; HART (F. C.), Director of Co-operation and Markets Branch of ONTARIO ; THOMSON (W. W.), Director of Co-operative Organization Branch of SASKATCHEWAN ; CRAIG (H. A.), Deputy Minister of Agriculture of ALBERTA ; all in THE AGRICULTURAL GAZETTE OF CANADA, Vol. 4, No. 4, Ottawa Government Printing Office, April 1917.

OTHER SOURCE:

Egg Marketing Service in Alberta, *The Grain Growers' Guide*, Winnipeg, 8 August 1917.

Recently much has been accomplished in Canada in the way of marketing agricultural produce co-operatively. The system has been found to be useful in that it relieves the farmer of the task of bargaining and selling and in that it tends to secure higher, uniform and fairer prices. This co-operative movement is guided and regulated by federal and provincial legislation and helped by federal and provincial Departments of Agriculture. The marketing of the most diverse products is effected, notably that of dairy produce, tobacco, sugar and maple syrup, seeds for sowing, fruit, poultry and eggs, vegetables, honey, live stock, wool, potatoes, onions, grain and meat. In this review we have already noticed several examples of this form of co-operation, notably the co-operative sale of live stock and wool, and that of butter and cheese in the province of Quebec.

The *Agricultural Gazette of Canada*, the official organ of the Department of Agriculture, in order to ascertain the steps taken hitherto in the different provinces for the furtherance of the organization of co-operative marketing, requested leading officials to supply information on the subject. We will summarize the principal results of this enquiry.

§ I. THE ORGANIZATION OF CO-OPERATIVE MARKETING IN ONTARIO.

The Ontario Department of Agriculture does not interfere in the business of marketing organizations. It does not itself do any marketing, even for the purpose of advertising the co-operative method. Its aim has been in every case to build up organizations of producers which are economically sound and self-supporting and take their proper place in the trade in farm products. Through its various branches the department can keep in touch with these organizations and help them. Through the Co-operation and Markets Branch it can help towards organization and incorporation and provide inspection of organizations. The introduction of district representatives has facilitated its task.

The following are some figures as to the various organizations.

There are seventy fruit growers' associations in the province : forty-six of them sell the fruit of their members and six buy for them supplies of spraying matter. The others have purely educational ends. The province produces annually about 3,000,000 barrels of apples, of which 250,000 barrels or 8 per cent. are marketed through associations of growers. A large proportion of the fruit of these associations is sent to West Canada and sold directly to farmers' organizations. The remainder is sold to the trade or exported, none or very little being sold by the organizations to consumers. The provincial Fruit Branch does most of its educational work through these organizations. It was largely responsible for organizing the Ontario Co-operative Fruit Organization, made up of seventeen local organizations which consign their fruit through one manager.

About seventy egg circles have been organized in the province and thirty or thirty-five of them are now active. In only one case has a group of circles combined to make consignments under one management. Otherwise they do business individually. Practically all the eggs are sold to wholesale houses directly, although in Eastern Ontario a few circles sell to large individual customers. Only one or two circles, which market poultry, deal in anything except eggs.

The thirty vegetable growers' associations in the province have a provincial organization which meets annually. These associations are mainly educational. A few years ago the provincial organization experimented in the co-operative purchase of seed for its local associations, but for various reasons this enterprise was discontinued. Ten of the associations sell vegetables.

The honey producers are well organized for educational purposes. The local associations are united in a provincial association which meets once a year and appoints the very important so-called "crop committee". This committee meets as occasion demands, receives reports as to the prospective production of honey, and recommends the wholesale prices at which it should be sold. Neither the provincial association nor the committee sells any honey nor acts otherwise than in an advisory capacity. The

experiment has recently been made of organizing one small honey-selling organization in the province.

Some thirty-one seed centres have recently been organized in Ontario by the Canadian Seed Growers' Association. As yet only half a dozen of them have seed for sale.

There have been organized some nineteen or twenty district breeders' associations, each of which holds a yearly sale of the stock of its members. A number of farmers' clubs in the province have for many years been carrying on the co-operative consignment of live stock, one club having an annual turnover of \$100,000.

There are 160 creameries and 1,000 cheese factories. Most of them are joint stock companies but are co-operative in so far as most of their stock is held by those who furnish their material. Dividends are however largely declared on stock and not on the produce so furnished. Dairy farmers all over the country are organized in associations, which do not as a rule trade in milk but intervene between producers and the trade, enabling contracts. At one centre only there is a producers' organization which collects its members' milk and retails it with very apparent and growing success.

There are between 300 and 400 farmers' clubs in the province. Their main object is educational but some of them are trying to market one or more products. A few are attempting to consign live stock, and the organization of other marketing associations has arisen out of many of them.

A number of recently formed organizations are endeavouring to trade in many commodities. The Manitoulin Marketing Association at first marketed wool but is now dealing also in lambs and cattle. It aims at marketing practically all the products of Manitoulin Island.

In their initial stages co-operative associations are not equipped for taking over all the functions of middlemen and dealing directly with consumers. Their trade is largely with the wholesale houses, and so far their business has been too limited largely to affect the price of farm produce for consumers. In practically every instance however they have improved the quality of output and reduced waste. The egg circles have practically eliminated that share of the 17 per cent. of bad eggs, estimated to come onto the market, for which their members were once responsible. The producer has in consequence received a slightly higher price for his eggs — on an average for the year from one to three cents a dozen more than before — and the consumer pays the old price but receives better value. The progress of co-operation in the province certainly justifies a hope that the cost of marketing will be lessened and the consequent gain shared by consumer and producer.

The following figures, which are approximate, give an idea of the movement towards association and co-operative marketing in this province.

Kind of association	Number of associations	Number of members	Number of associations selling agricultural products
Agricultural Societies	360	100,000	—
Women's Institutes	900	30,000	—
Farmers' Institutes or Boards of Agriculture	90	19,000	—
Farmers' Clubs	300	12,000	—
Experimental Unions	1	5,000	—
Egg circles	60	2,100	35
Fruit growers' associations	70	2,100	52
Ploughmen's associations	15	1,500	—
Corn growers' associations	3	1,200	3
Vegetable growers' associations	30	1,000	11
Horse breeders' associations	1	525	—
Dairymen's associations	2	500	—
Poultry associations	1	470	—
Swine breeders	3	440	—
Bee keepers' associations	26	425	1 (Honey producers' association.)
Potato growers' associations	3	300	3
Seed Centres	31	267	31
Sheep breeders' association	1	230	—
Onion growers' associations	2	70	2
Seed " "	1	50	—
Tobacco " "	1	—	1
Bean " "	1	—	1
School fairs	268	61,000	—
Junior farmers' improvement associations	75	1,600	—
Creameries	160	38,000 patrons	160
Cheese factories	1,000	40,000 " "	1,000
Ontario Co-operative Fruit Growers' Association	1	—	—
United Farmers' of Ontario	1	—	—
United Farmers' Co-operative Company	1	—	—
Breeders' clubs	20	—	18

To this list there should be added the unknown number of the Milk Producers' Associations, Live Stock Shipping Associations, Beef Rings and Weigh Scales Associations, and of the Farmers' Clubs having a selling branch.

Complete data are also lacking as to the turnover of the various classes of associations. It is known however that 23 Fruit Growers' Associations received \$442,775.70 for sales and that 19 spent \$60,477.67 on purchases; that 14 Egg Circles sold produce for \$111,035.22 while three bought for \$536.50; that 12 Farmers' Clubs sold produce for \$178,624.39 while 71 of them spent \$225,267.89 on purchases; and that nine Rural Organizations sold for \$145,011.90 while three of them bought for \$5,750.52.

§ 2. CO-OPERATIVE POULTRY MARKETING IN SASKATCHEWAN.

The practice of fattening and marketing poultry co-operatively was introduced into Saskatchewan in 1907, when the Provincial Dairy Commissioner established two stations for fattening poultry in connection with two government creameries. Local farmers brought their birds to these stations to be fattened; and on fixed and widely advertised dates a poultry expert in the employ of the Dairy Branch gave demonstrations at the stations of killing and dry plucking and delivered lectures on various subjects connected with poultry farming. The dressed poultry was then sold by the Dairy Commissioner, and the proceeds, less the cost of fattening and marketing, remitted to the producers. This system of marketing aroused considerable interest; and in 1913 eight stations were at work and dealt with 5,126 pounds of poultry.

It was however realized that these stations could serve only a limited number of persons. As many had become familiar with the methods of fattening, it was decided to discontinue the stations and place the services of the Department of Agriculture at the disposal of all poultry farmers in the province. It had been found that poultry dressed on farms did not sell well, largely because the birds were seldom thus properly killed and dressed, and therefore did not keep well even in cold storage. It seemed therefore that the department could most usefully establish one or more killing and marketing stations to which farmers could send the birds they fattened, to be killed and dressed on a uniform plan by experts and afterwards sold in quantities large enough to attract the attention of the principal poulterers' firm.

In the autumn of 1915 this work was undertaken by the Co-operative Organization Branch; and with the help of the department of poultry husbandry in the provincial agricultural college a poultry killing and marketing station at Saskatoon was conducted during December. As the birds reached this station they were weighed and graded, and an advance payment of the approximate amount of the current market price was sent to the owner. The birds were killed, dressed, and placed in cold storage until February, when they were sold and the price received for them, less the sum advanced and the cost of handling, sent to the owner. Altogether 18,799 pounds of poultry passed through this station; and the prices realized were higher by from three to five cents a pound than those locally prevalent at that season, and gave general satisfaction.

In 1916 two killing and marketing stations, at Saskatoon and at Regina, were conducted on these lines. The following table shows the quantities of poultry which passed through them ;

	Regina	Saskatoon
Chickens	9,169	14,280
Other fowl	7,812	10,188
Turkeys	6,519	6,900
Ducks	1,101	817
Geese	97	789
Total	24,698	32,974

The results of the sales are not yet known.

Plans for extending the work and making it more generally useful to poultry farmers in the outlying parts of the province are being considered. It is evident that the expense of getting the birds to the stations — now the greatest drawback to the system — must be reduced. Perhaps additional killing stations might be established at points where several different railway lines converge ; or a collection of consignments might be made by a specially equipped freight car which would run at fixed and well advertised times over the railway lines tributary to each killing station.

§ 3. CO-OPERATIVE MARKETING AND THE ORGANIZATION OF MARKETS IN ALBERTA.

Great efforts have been made in the province of Alberta to organize the trade in agricultural produce co-operatively.

In this review we have already noticed the co-operative sale of wool graded according to quality (1) which has had a most encouraging success. Three years ago Alberta wool was selling for from 11 to 14 cents a pound or even less. In 1916 the price was from 30 to 35 cents. ; and although the rise was partly due to the special conditions, it cannot be denied that the various wool growers' organizations have steadied and improved the market. At present such associations are at work at Edmonton, Calgary, Lethbridge, Vermilion, Pincher, Creek and Lacombe. Practically the whole of the Alberta clip will be co-operatively marketed this year.

The owners of purely bred flocks have moreover organized combined sales of rams, and these are having a good influence in standardizing prices and advertising purely bred stock.

The Grain Commission, directed by the dominion government, exercises great powers with respect to the classification of grain and the grain trade generally. Co-operative selling is conducted by two farmers' organizations

(1) See our issue for February 1917, page 14.

which have several times occupied our attention (1), the Grain Growers' Grain Company and the Farmers' Co-operative Elevator Company. We need only recall the important role they play on the grain exchanges and the large amount of grain they handle. The representative of the producer is through them himself in a position to know how grain is handled and to prevent the deflection of profits to middlemen.

The Department of Agriculture has a branch for marketing butter directed by the Dairy Commissioner. All creameries may have their butter marketed through the commissioner if they sign an agreement with the department. They send their butter to him at Calgary directly; it is graded and placed in cold storage; and may be either sold immediately or kept until its price rises. As soon as it is received the commissioner or one of his staff reports to the buttermakers on its quality, and advises as to its improvement, sometimes in the person of instructors sent out to the factories. This system has a good effect in standardizing the grades of butter and improving its quality.

Egg circles are less numerous in Western than in Eastern Canada, where there is more poultry and settlement is closer. In 1916 however eight of these associations were organized in Alberta by the representative of the Dominion Department of Agriculture. Each member of an association agrees to sell his eggs by its means. In some cases he deposits \$5 which go to form a fund with which to finance sales and which allow an advance payment to be made for each consignment. In the first place the eggs are graded: they are sold by grades; and as their identity is preserved members supplying high grades are rewarded and those supplying low grades penalized. No eggs may be sent by a farmer when they are more than three or four days old.

A farmers' Egg Marketing Service has been established. Until the farmers themselves are able to manage it, it will be supervised by officials of the poultry division of the Provincial and the Dominion Departments of Agriculture.

Its objects are: (a) to provide farmers of the province, including those in the most outlying districts, with the best possible marketing facilities; (b) to provide for the efficient grading of the eggs with a view to obtaining the highest prices; (c) to make it possible for individual farmers to receive prices proportionate to the quality of their eggs; (d) to ascertain, by examination of the eggs, which members are not following effective methods, so as to be able to advise them intelligently; (e) to stimulate a larger production of poultry and eggs for the benefit of the farmers themselves as well as to meet the exigencies of war conditions; (f) to eliminate the unnecessary loss now consequent on inefficient marketing and to develop a good reputation for Alberta eggs.

Any farmers' organization will have the privilege of consigning eggs to the Egg Marketing Service. It is suggested that in the case of such as them as are not specially organized egg marketing associations, arrangements

(1) See our issue for March 1917, p. 18.

for the consignment of the eggs and for supervision be entrusted to the executive of the organization or a specially appointed egg marketing committee, which should first arrange for one or more collecting depots at the local centre or the point of consignment. It is suggested that the tradesmen who have hitherto been handling the eggs be included in the arrangement, and co-operate as local consigners, each of them receiving one cent. per dozen eggs or 30 cents. a case for his work. Local consigners should make a point of sending eggs to the grading station as soon as they have accumulated a sufficient quantity of them.

All local poultry farmers should be allotted numbers by the local consigners, each consigner using a particular range of numbers. This system will render the identification of the eggs certain.

§ 4. LEGISLATION AS TO AGRICULTURAL CO-OPERATION IN NOVA SCOTIA.

In the year 1908 an "Act to Facilitate the Incorporation of the Farmers' Fruit Produce and Warehouse Associations" was passed by the legislature of Nova Scotia. It has been amended from time to time, and now contains special provisions allowing local companies of farmers and fruit growers to unite for the purchase of supplies of all kinds, and for disposing of farm produce, including fruit, field crops, live stock and live stock products. Other provisions enable the union of local companies which wish to co-operate with each other. Such a union is exemplified in the United Fruit Companies of Nova Scotia, an organization which buys and which distributes among the local units produce of the kinds already mentioned, and which disposes of produce which farmers wish to market co-operatively. Hitherto the companies organized under this Act have been in the fruit growing districts, but there is nothing to prevent such organization on the part of farmers in any district of the province, whether or not they be fruit growers.

In 1914 "The Farmers' Co-operative Societies Act, 1914", was passed. It provides for the incorporation without fee under the Nova Scotia Companies' Act of any society of farmers; and allows them to co-operate for the purchase of "manures and artificial fertilizers of all kinds, feeding stuffs, seeds, spraying materials, spraying outfits, and farming outfits of all kinds", and for the sale of any farm produce. They are limited as to the objects they may purchase, practically to materials directly necessary to agriculture, household commodities being excluded, but they may sell any farm produce, including live stock. The Department of Agriculture has usually recommended societies of farmers in all but the fruit growing districts to co-operate under this latter Act.

It was felt however that it might be disastrous to grant too wide powers to such societies in the less closely settled parts of the province. Hence all the societies in the Annapolis Valley and the adjoining fruit growing

districts are incorporated and doing business under the former of the Acts we have cited, while those outside the fruit growing districts are governed by the "Farmers' Co-operative Societies Act, 1914".

Hitherto the Department of Agriculture has supported these organizations only by its propaganda work. All the organization in the fruit growing districts has been approved by the department but is due to private initiative. Outside these districts the department has given some help in that it has held meetings to explain the nature and purpose of the co-operative organization (1).

(1) For information as to the province of Quebec we refer the reader to the article entitled "The Dairy Industry in the Province of Quebec and Co-operation" in our issue for August 1916, page 5, which gives an account of the Co-operative Society of Cheesemakers of Quebec, and to page 40 of our issue for July 1916, where under the title "Co-operation in Quebec" we give some data as to the co-operative agricultural association, formed chiefly by tobacco planters, in the Yamaska Valley. There exist also in Quebec the Pure Maple Sugar and Syrup Producers' Agricultural Co-operative Association; and the Quebec Seed Growers' Co-operative Association, which was established in 1914, owns large warehouses, and has a capital of more than \$22,800 which will reach \$30,000 and has been subscribed by more than 200 members. This latter society owns plant of the most modern description for treating and testing seed.

MISCELLANEOUS INFORMATION RELATING TO CO-OPERATION AND ASSOCIATION IN VARIOUS COUNTRIES.

BRITISH INDIA.

1. THE ACTIVITY OF CO-OPERATIVE CREDIT SOCIETIES IN CEYLON IN 1916. —
Supplement to *Tropical Agriculturist*. July 1917.

Fourteen new societies registered in 1916 brought the total number of co-operative credit societies in Ceylon up to 68. They are distributed as follows: 19 in the Western Province; 9 in the Southern Province; 10 in the Central Province; 17 in the Northern Province; 2 in the North-Western Province; 4 in the Province of Uva; 3 in the Province of Sabaragamuwa; 2 in the North-Central Province; and 2 in the Eastern Province.

The total membership of these societies is 6,488, having increased by 2,230 in 1916. Their total paid-up capital is Rs. 29,040 (1). During 1916 they lent to members Rs. 25,168 and recovered Rs. 13,018.82, while they received altogether in government loans Rs. 2,135.

Thirty-four societies were inspected during the year.

All the societies, except three which are industrial, have agricultural improvement as their main object. Several of them have tried to grow new strains of paddy, received through the Ceylon Agricultural Society, and a few are starting experimental gardens with outside help. Seven have bought 79 tons of manure, of the approximate value of Rs. 8,000, for paddy and cocoanut plantations.

* * *

2. CO-OPERATIVE SOCIETIES IN BENGAL, IN 1915-1916. — *Report on the Working of the Co-operative Societies in Bengal for the year 1915-1916*. Calcutta, Bengal Secretariat Book Depot, 1916.

The conditions of 1915-1916 were not uniformly favourable to co-operation in Bengal. Floods caused considerable damage to the jute and the winter rice crops in many districts of Eastern Bengal. In the Bankura district famine prevailed. In Tippera district the low price obtained for jute in 1914-15 brought about a want of ready money among the labouring and cultivating classes; and high floods in June, July and August 1915 destroyed the crops on the ground and with them the visible security for credit, and thus induced wide-spread distress although there was never a shortage of food supplies.

The assistance rendered in these circumstances by the co-operative societies was substantial. During the year the number of societies of all kinds in Bengal rose from 1,992 to 2,243, the number of members from 107,116 to 121,833, and the working capital from Rs. 1,09,51,050 to Rs. 1,24,48,573. The progress made in four years becomes clear when it is recalled that on 30 June 1912 the combined capital of all the societies was Rs. 26,00,000. Of the Rs. 1,24,48,573 which constituted the combined working capital in the year under review Rs. 42,37,744 represented loans from central and other societies, and the net capital was therefore Rs. 82,10,829.

Central Societies. — The scheme for the inauguration of a provincial bank in the presidency was again considered but it was decided that it should remain abeyant for the present. The majority of the central banks have no difficulty in raising sufficient capital locally. Two new central banks were established during the year, but one former central bank came to be classed as a non-agricultural society and the total number of these banks was therefore 39 on 30 June 1916. Their working capital rose during the year from Rs. 40,88,000 to Rs. 46,00,000; their paid-up share capital from Rs. 4,89,000 to Rs. 6,52,000; and their deposits from Rs. 33,69,000 to Rs. 37,61,000. Their total fluid resources on 30 June 1916 amounted to Rs. 8,41,984. Outstanding loans amounted to Rs. 37,67,420 as against Rs. 31,01,490 in 1915. Loans granted in 1915-1916 amounted to Rs. 13,95,000; and therefore the total amount of loans on 30 June 1916 was Rs. 51,62,420. In 1915-1916 a sum of Rs. 7,91,607 was collected towards principal from the debtor societies, including central societies, as against Rs. 2,68,000 in 1914-1915. On the whole there was a great improvement in the working of the central banks.

Supervising Unions. — The number of these increased in 1915-1916 from eight to twelve, and their membership from 139 to 177.

Agricultural Societies. — There were fewer registrations of new agricultural societies in 1915-1916 than in previous years. Their number rose from 1,853 to 2,063, thus increasing by 210; and their membership rose from 85,515 to 94,006, thus increasing by 10 per cent. instead of by 16 per cent. as in the previous year. The combined working capital rose from Rs. 42,74,969 to Rs. 56,93,529, increasing by about 8 per cent. Of the 2,067 societies 1,860 are affiliated to central banks. The average capital of a society decreased from Rs. 2,844 in 1915 to Rs. 2,754 in 1916. Loans issued to members amounted to Rs. 16,86,000 in 1915-1916, as against Rs. 15,73,000 in 1914-1915. Loans amounting to Rs. 14,11,991 were repaid by members in 1915-1916 as against Rs. 7,73,900 in 1914-1915. On 30 June 1916 outstanding loans to members amounted to Rs. 49,78,046, of which Rs. 13,24,388 or 26.6 per cent. were overdue. The percentage overdue on 30 June 1915 was 28.4. There was thus an improvement in realizations.

Two new grain banks were formed, and one new supply society which made the total number of supply societies three. An interesting experiment was the formation of the *Khelar Irrigation Society*.

Non-Agricultural Societies. — The number of the credit societies having limited liability, which form the great majority of the non-agricultural

societies, passed from 76 to 90, their membership from 15,644 to 21,029 and their working capital from Rs. 15,67,000 to Rs. 20,46,000. Loans repaid during the year by members amounted to Rs. 13,02,992 as against Rs. 9,78,627 in 1914-1915. The percentage of the amount of loans outstanding at the beginning of the year and of those granted during the year formed by repayments during the year was 41.08 in 1915-1916 as against 41.1 in 1914-1915.

The existence should be noticed of seven co-operative fishermen's societies. The number of weavers' societies increased during the year from five to 17, but four of them had not yet become active on 30 June 1916. At that date one cattle insurance society had begun operations.

Reserve Funds. — The following table shows the reserve funds of the three kinds of societies at the beginning and end of 1915-1916.

	On 1 July 1915 Rs.	On 30 June 1916 Rs.
Central Banks	75,072	1,11,901
Non-Agricultural Societies . .	64,693	91,956
Agricultural Societies	4,54,798	6,28,050

The figures for 30 June 1916 exclude appropriations to reserves from the year's profits. In this year the central banks made a net profit of Rs. 1,08,538; the non-agricultural societies one of Rs. 1,03,961; the agricultural societies one of Rs. 1,92,498.

Thus the co-operative movement is acquiring public favour more and more, a fact proved by the increased inflow of deposits; and its importance to agricultural development in the presidency is being noticeably accentuated.

FRENCH PROTECTORATE OF MOROCCO.

THE THRIFT SOCIETIES.

A *dahir* of 26 May 1917 has extended to Morocco the native thrift societies, as these exist in Algeria and Tunisia. It is their object:

" 1st. To enable native cultivators, by loans in money and kind, to maintain and develop their crops and plantations and to improve and increase their agricultural implements and their flocks and herds;

" 2nd. By means of loans or temporary relief to help poor cultivators suffering seriously from diseases, epizooty, invasions of grasshoppers or crickets or other disastrous events;

" 3rd, To rescue native cultivators from the evil practices of usury and engrossment, superseding the natives when necessary and taking in their place all action tending to annul or reduce their engagements to outsiders who have

taken advantage of their weakness, their foolishness or their inexperience, and tending to repudiate payment of the sums thus demanded ;

" 4th. To make contracts for collective insurance against fire, hail, mortality among live stock, etc. ;

" 5th To form co-operative societies for buying, selling, preserving and converting agricultural products emanating from the farms of members exclusively ;

" 6th. To buy and keep agricultural machinery to be let to members of the society for small sums "

All native cultivators not protected by foreigners paying the land tax belong compulsorily to the society, and centimes additional to this tax occur among assets, as well as various receipts and advances from the State.

ITALY.

THE CO-OPERATIVE AND MUTUAL, AGRICULTURAL, SOCIETIES IN ITALY ON 31 DECEMBER 1916. — Catalogue of these societies on 31 December 1916 published by the *Confederazione Generale delle Cooperative e Mutue Agrarie Italiane*, Rome, 1917.

From a catalogue of co-operative and mutual agricultural societies, recently published by the General Confederation of Italian Co-operative and Mutual Agricultural Societies, it appears that on 31 December 1916 there were in Italy 6,406 agricultural co-operative societies as against 5,289 on 31 December 1913, the date of the same confederation's last catalogue — and 1,347 agricultural mutual societies — as against 1,069 at the end of 1913. These 6,406 co-operative societies are distributed as follows :

Co-operative rural funds	2,725
Agricultural consortia and purchasing societies	1,567
Social dairies	1,150
Various co-operative societies	735
Co-operative enological and viticultural societies	215
Co-operative factories of superphosphates	14
Total . . .	6,406

The greatest number of co-operative societies are in the provinces of Turin (336), Udine (342), Alexandria (302), Rome (248), Belluno (193), Brescia (188), Parma (180), and Cuneo (179).

The agricultural mutual societies are distributed as follows :

Mutual societies insuring live stock	1,085
" " " against fire	255
" " " against accidents	4
" " " (various)	3
Total	1,347

The greatest number of agricultural mutual societies are found in the provinces of Milan (200), Como (165), Turin (156), Udine (96), Novara (77) and Cuneo (67). The mutual live stock societies are scattered over almost all the provinces, and found especially in those of Milan (199), Como (164), Udine (93) and Novara (64). The mutual fire insurance societies are, on the other hand, numerous in Piedmont, the province of Turin alone having 119 of them and Alexandria 61.

Altogether the catalogue we have mentioned shows that from the end of 1913 until the end of 1916 the number of agricultural co-operative societies in Italy increased by 1,117 and that of agricultural mutual societies by 278.

RUSSIA.

THE CO-OPERATIVE SALE OF TOBACCO.

SOURCES :

- LUTZKEVITCH : Хрещатинское товарищество. (*The Co-operative Credit Society of Chrestchatinskoc*), in "Вѣстникъ Мелкаго Кредита" (*The Messenger of Small Credit*), No 50. Petrograd, 1912.
- LIBERMAN : Табаководы и кооперативныя учрежденія (*Tobacco Growers and Co-operation*), in "Вѣстникъ Мелкаго Кредита" no, 7 Petrograd 1913.
- L. : Первая табачная кооперативная фабрика (*The First Co-operative Tobacco Factory*) in "Вѣстникъ Мелкаго Кредита" No. 14, Petrograd 1913.
- P. G. : Къ вопросу о сбытѣ табака въ Черниговскѣй губерніи (*On the Question of the Sale of Tobacco in the Province of Tchernigov*), in "Вѣстникъ Мелкаго Кредита" No. 19 Petrograd, 1913.
- ZINRIUKIN : Табаководство и кооперація (*The Production of Tobacco and Co-operation*), in "Вѣстникъ Кооперациі" (*The Messenger of Co-operation*) No. 5. Petrograd, 1914.
- A. L. Ко : Залогъ и сбытъ табаку (*Advances guaranteed by Deposits of Tobacco and its Sale*) "Вѣстникъ Мелкаго Кредита" No. 7. Petrograd, 1917.

A new and important conquest of the co-operative principle which has lately been consolidated in Russia concerns the co-operative sale of tobacco. Tobacco growing is a notable branch of agriculture in Ukraina, Southern Russia, Crimea and the Caucasus. The average area on which

tobacco is grown is 65,500 deciatines (1) and the harvest surpasses 7,500,000 puds (2) and gives means of subsistence to 316,310 families. The average area of a tobacco plantation is from 0.15 to 0.3 deciatines. The application of the co-operative principle therefore favours very small proprietors who are particularly liable to exploitation by middlemen.

The first attempt to organize the sale of tobacco co-operatively was made in 1911 in the province of Tchernigov and was followed a year later by the formation of the co-operative societies of Yalta (Crimea) and Bessarabia. In the province of Tchernigov the co-operative credit societies of Chrestchatiaskoe and Rogstchevskoe began to make advances out of funds guaranteed by the deposit of tobacco, paying growers 60 per cent. of the average market price of the tobacco. Analogous operations were conducted in 1912 in the district of Yalta by the small credit fund of the Zemstvo and the co-operative credit societies of Bogatyr and Korbekly, which applied a method slightly different from that followed by the co-operative societies of Tchernigov for they left the tobacco with the growers but obliged them to insure it, so that it was withdrawn from them only at the moment of sale. In the same year similar advances began to be made in the co-operative credit society of Rjevsk in Bessarabia, which is today a true model for this branch of co-operation. It made advances guaranteed by the deposit of tobacco, and also superintended tobacco growing, employing as instructors specialists who taught members perfected methods of cultivation and introduced the best tobacco among them. In this respect the society approximated to the procedure of German co-operative societies. An interesting experiment was made in the same year in the province of Tambor in which the first co-operative tobacco factory was organized as the result of an agreement between the co-operative credit and the co-operative consumers' society of Staroe Seslavine. The consumers' society withdrew the tobacco deposited with the credit society and passed it into its factory. The factory was able to secure a strong position in the market by entering into solid commercial relations with 180 co-operative consumers' societies.

These isolated experiments, important as they sometimes were, could not seriously influence the market and sometimes quite failed to reach their object for the resistance of manufacturers and combined middlemen could not always be overcome.

The war however gave a vigorous impulse to this movement for it necessitated the formation of strong regional and district organisms.

In Siberia the co-operative credit society of Malyscevsko-Angarskoe succeeded in combining a number of co-operative societies in Pabaikal and Irkoutsk and thus creating a strong union of co-operative societies for selling tobacco.

In European Russia unions were formed in 1916 in the province of Tchernigov and Poltava where quite 3,800 villages are employed on tobacco growing and annually produce 3,379,000 puds or 45 per cent. of the total year's

(1) 1 deciatine = 2.689 acres

(2) 1 pud = 40 lbs.

harvest in Russia. The large development of co-operative credit in Poltava, where there are 251 co-operative credit societies, seventy-seven savings and credit funds, nine zemstvos' funds for small credit, four co-operative unions for small credit, six rural banks etc, in all 617 institutions of small credit, has allowed operations to be on a very large scale. The operations of the unions of Romny, Konotop, Niejin, etc., are already organized. The union of Romny has itself made advances on 100,000 puds of tobacco or nearly 10 per cent. of the total harvest of the district. Operations of this kind were begun in the districts of Lechvitzkij, Prilukskij, Romensky, Konotopski and Nejenski and in the southern districts of the province of Tchernigov.

A section of the co-operative societies have made an agreement with the consumers' co-operative societies of Moscow : they furnish their tobacco to the factory of the union which has been bought by the co-operative society of Staroe Seslavine. But this factory cannot wholly absorb what constitutes a notable part of the total product ; and the decision of the tobacco manufacturers not to buy tobacco from the co-operative societies obliges these to seek another method of getting rid of their produce. Therefore the representatives of the co-operative credit societies of the district of Romny decided at their meeting that they would themselves organize a factory.

At the same time co-operation for the sale of tobacco was faced with another very important question, that of the sale of tobacco abroad, for in 1916 the representatives of the administration of the State monopoly in France began to make large purchases in the province of Tchernigov. At the meeting of representatives of the union of Romny, at which representatives of the Popular Bank of Moscow were also present, the organization for exportation abroad was discussed, that employed in exporting flax being taken as a type of that which should from 1917 onwards be applied to the tobacco trade.

UNITED STATES.

THE CO-OPERATIVE PRODUCTION AND SALE OF RAISINS IN CALIFORNIA. — C. A. Murdoch, Secretary of the California Associated Raisin Company, in *The Grain Growers' Guide*, Winnipeg, Manitoba, 25 July 1917.

California is the home of the raisin industry in America and the greatest raisin producing country in the world. The Mediterranean countries are the other great areas for the production of raisins and Spain was first among them for centuries. Raisin grapes were introduced into California in 1851 but the industry had its real beginning there only in 1876. For the first six years progress was slow. In 1879 the crop first exceeded 1,000,000 pounds. In 1892 it equalled that of Spain, and was reported by the United States Department of Agriculture to be reducing the importation of foreign raisins by 20 per cent. In 1895 it amounted to more than 9,000,000 pounds ; in the next year it jumped to 14,000,000 pounds ; and it continued

to increase steadily until it has reached the enormous total of 180,000,000 pounds. The raisin grape is now grown on approximately 150,000 acres in California.

In the early days the growers did their own marketing individually; but companies soon organized themselves for the purposes of buying raisins from the growers, packing them and marketing them under various brand names. Competition among these companies gradually lowered the prices to growers until at last the latter were selling at less than the cost of production. The state of affairs became so unbearable that in 1912 the growers banded together and organized what is now known as the California Associated Raisin Company, an association which aims at giving such stability to the raisin market that a fair price is guaranteed to the growers. The company saved the raisin industry from ruin and has been a decided success. It is governed by a board of twenty-five trustees apportioned among five districts. These trustees, when elected in 1912, became the legal representatives of the subscribers with full power to act for them in the work of incorporating and conducting the company for seven years. The interest of each individual subscriber is shown by a trust certificate, is sued to him by the trustees, transferable and entitling the holder to his proportion of dividends but to no voting rights. At the end of the seven years the trust agreement will expire, and the trust certificates will be exchanged for regular corporation stock certificates.

The trust agreement provided that \$300,000 should be subscribed before it came into force. This was done duly, about 90 per cent. of the amount being subscribed by raisin growers and the balance by business and professional men of the raisin growing district. Immediately after the company had been incorporated in 1912 the trustees and directors decided that in order to control raisin prices they must control not less than 60 per cent. of the crop for three years, with the option of doing so for further two years. After a long, hard struggle they obtained control of 76 per cent. of the crop. The company began its real work in the spring of 1913. The 1913 and 1914 crops were received, and sold and paid for in full at satisfactory prices. The 1915 crop, the largest in the history of the industry by 30,000 tons, was received and paid for at guaranteed prices. A campaign for securing contracts for crops on additional acreage was begun on 1 January 1916 and prosecuted vigorously until 1 April. It was based on a statement by the board of directors that all contracts would be surrendered and efforts to control prices abandoned if contracts for 15,000 additional acres were not signed before 1 April. The campaign was an overwhelming success. The total area under contract to the company is now about 157,000 acres, is owned by more than 8,000 growers, and represents almost exactly 90 per cent. of the acreage under raisins in the State.

The stockholders of the company now number 3,569. Its net profits up to 30 September 1915 were \$198,588.32. Out of that sum two dividends have been paid, one of 5 per cent. and one of 6 per cent., leaving a surplus of \$84,497.32. Since the 1916 crop has not yet been sold the figures for that year cannot be given.

Between 1 April 1913 and 1 April 1916 the company sold and despatched 255,233 tons of raisins together with a small tonnage of other dried fruits, and received therefor a gross sum of more than twenty-two million dollars. In the same period the company paid the growers more than seventeen million dollars, after paying the costs of handling, packing and selling the fruit.

Today the company is well supplied with warehouses and packing plant ; it has an efficient selling organization ; its " Sun-Maid " is the only nationally advertised and established brand of raisins and dried fruits. Prices have acquired a stability which they previously lacked ; speculation may be said to have been eliminated ; and the value of raisin vineyards has been enhanced.

The example of the raisin growers has encouraged the peach growers of California to organize themselves on similar lines to them. The Californian prune growers, the pea packers of Wisconsin, the cocoa-nut planters of the Philippines, and many others, are studying the company's organization and methods and trying to adapt them to their own needs.

Part II: Insurance and Thrift

UNITED STATES.

THE ORGANIZATION OF FARMERS' MUTUAL FIRE INSURANCE COMPANIES

OFFICIAL SOURCE:

UNITED STATES DEPARTMENT OF AGRICULTURE *Bulletin* No. 530. VALGREN (V. N. (Investigator in Agricultural Insurance): *The Organization and Management of a Farmers' Mutual Fire Insurance Company*. Washington, D. C., 8 May 1917.

In a recent article (1) we explained the general conditions of mutual insurance against fire in the United States and gave particular figures with regard to Illinois.

We wish here to recall only the rapidity of the progress of the companies undertaking such insurance. In some States of the Middle West fully three fourths of all insurable farm property are now insured by the farmers' own companies. Companies of this kind are found in every State except Florida, Mississippi, Louisiana, New Mexico, Arizona and Nevada. A study of the organization of these mutual associations which, while generally founded on purely empirical principles, have yielded already excellent results, is interesting. Their importance must increase, for the government of the United States must seek to provide them with a more rational basis and one which will be as much as possible uniform.

The official bulletin, which is the source of our information describes a typical farmers' mutual fire insurance company, susceptible of modification to suit the legislation in particular States, and practising methods which in some points are an improvement on those now in use. ●

§ I. ORGANIZATION AND ADMINISTRATION OF THE COMPANIES.

a) *Articles of Incorporation and By-laws.* — The organization of a farmers' mutual insurance company should be preceded by a certain amount of preparatory work. The legal step of incorporation should not be taken until as large a percentage as possible of the considerable farmers in

(1) See our issue for June 1917, page 34.

the community have been interested in it. Twenty-five States now provide in a separate division of their insurance laws for the incorporation of farmers' mutual fire insurance companies. In most other States such companies can be incorporated under the laws referring to mutual fire insurance companies in general.

In any case the organizers are required to set forth, in a form usually known as the articles of corporation, the name of the proposed company, the situation of its headquarters, its purpose, its territorial sphere, its conditions of membership, an outline of the proposed form of its management, and the conditions allowing its articles of corporation to be amended.

As soon as incorporation has been accomplished a set of by-laws should be drawn up, and should describe the nature and purpose of the organization in so far as these are not contained in the articles of corporation.

The fact that a company is organized to prevent the disastrous incidence of losses does not mean that it should exempt losers from all the consequences of their losses. A reasonable part of a loss should always be borne by the loser, in order that it should be to his interest, above that of all others, that his property remain in existence, and that his strongest incentive to safeguarding it should be retained. There is otherwise a danger that a slight change in economic conditions may make it directly to his pecuniary advantage that his property be destroyed.

b) *Territorial Sphere.* — There has been on the part of legislatures in recent years a growing tendency to allow a wide territorial sphere to mutual companies. Several States now allow them to operate over an entire State. The tendency of the companies to avail themselves of this privilege has been somewhat less marked. The ambition of a company to grow by extending its territory as well as by adding to its risks within its existing territory seems natural, but there is danger that the extension will have undesirable results. In general the interest and pride taken by the community in a farmers' mutual company give it an advantage. Each individual member actively promotes the interest of the organization, is anxious to see all losers receive equal justice, is usually satisfied with a reasonable indemnity if he himself suffer a loss. The knowledge which members have of one another's character and business tends to minimize the moral hazard. An unscrupulous member, who would be quite ready to occasion loss to a large insurance company, perhaps in a distant city, is likely to hesitate before he throws loss on his neighbours. Many of the local mutual companies have done business for half a century or more without a single lawsuit. Such a record would rarely be possible except in the case of a company founded on true co-operation and attaching to itself directly the interest of the community. However if risks be confined to a limited territory an important saving is effected in the travelling expenses of directors, inspectors and adjusters.

c) *The Board of Directors and the Officers.* — Except where local conditions require a certain grouping or distribution of directors, nine directors form a board of convenient size and should be divided into three equal groups,

one of which will, in rotation, retire at the end of each year. Thus continuity is given to the board.

There are good reasons why the regular officers should generally be elected by the board from their own number. Especially is this true of the secretary and the president. The duties of the treasurer however, as ordinarily prescribed, bring him little into touch with the actual insurance business, and therefore this office may well be held by a responsible person otherwise unconnected with the company. An official or responsible employee of a local bank often makes a good treasurer. In exceptional cases it may be found expedient to elect a secretary who at the time has no farm property to insure and therefore cannot be a member of the company in a technical sense. He may, for example, be a retired farmer who has for years been an active member of the company.

The best plan probably is to provide for an executive committee responsible for all important business of a more or less routine nature. The president, secretary and vice-president properly constitute such a committee. All companies should also provide for an auditing committee, which ordinarily, and especially in the case of companies of moderate size, should consist of members of the company. An auditing committee of three should have its chairman and at least one other member chosen at the annual meeting from outside the board of directors. It may be well that the third member should be chosen by the board from their own number.

§ 2. INSURANCE TRANSACTIONS.

The most important single problem confronting a newly organized farmers' mutual fire insurance company is that of securing a sufficient number of acceptable applications for insurance within a reasonable distance of the head office. The standard applied to risks must vary with the economic development of a community. In a new or undeveloped community risks have to be accepted which could and should be rejected in one more advanced materially. The cost of insurance will therefore be higher in an undeveloped than in a developed community, but commercial rates for insurance — if commercial insurance be available on any terms — will be equally higher, and therefore the saving effected by co-operation will not be less. The requirements as to the personal character of applicants need not and should not vary.

As to who should solicit or accept applications there is a variety of opinions. In about 35 per cent. of the farmers' mutual companies one or more special agents receive all applications, and in other 10 per cent. they are received at least in part by such agents. The remaining 55 per cent. of the companies restrict the right to receive applications to the officers or to the directors and officers. The extent to which the co-operative spirit has developed in a community should be considered in deciding on a plan for securing business. It is believed however that the plan of charging the directors with this duty whenever possible will strengthen the co-

operative spirit. The plan of employing agents risks a sacrifice of the interests of the company to an effort to secure large applications and commissions. The compensation for securing business should be a fixed amount rather than a percentage of the advance charges collected: the person receiving the application will thus be left unbiassed as to valuations and the consequent amounts of insurance to be written.

The *application* should contain an accurate and fairly detailed description of the property to be insured, the proposed member's formal acceptance of the articles of incorporation and the by-laws of the company, and his agreement to meet his share of all losses and legitimate expenses. The policy or membership fee and the initial premium should be forwarded with the application to the secretary, unless there is an arrangement for a periodic settlement of accounts between the company and the person receiving the application. The application should, when fully and regularly approved by the company's representative who receives it, impose full liability on the company until it has been formally rejected or a policy has been issued. The applicant may otherwise, especially where the secretary does not give his full time to his office, be unprotected for some time after he has taken all steps incumbent on him to procure insurance.

When a conditional approval by the company's representative who receives the application is provided for in the by-laws, an application so approved should not bind the company until it has been finally accepted at headquarters. The reason for rejection should be clearly stated whenever this is practicable.

It is possible for a farmers' mutual fire insurance company to bring the average annual percentage of loss considerably below that experienced by larger commercial companies. The annual loss by fire in the United States, whether covered by farmers' mutual companies or not, is however very much higher than the average in other countries. The first and perhaps most important step towards lessening risks and eliminating preventible losses is to provide an efficient *system of inspection*.

In our previous article on farmers' mutual insurance against fire we noticed the desire of the members of the mutual companies of Illinois to render policies more uniform. The United States Department of Agriculture considers however that the advisability of requiring farmers' mutual insurance companies to use a *standard policy* for all classes of insurance may be questioned. In many instances in which the use of a standard policy has been required by State law the companies have still considered the by-laws printed on the back of the policy as constituting their true agreement with the insured. It is unquestionably essential that the agreement between a company and its members should be understood. The standard insurance policies of the various States must be admitted to be difficult reading for one not accustomed to legal phraseology. Moreover their provisions regarding factories are of no interest to farmers. These considerations have induced the legislatures in a majority of the States having legal provisions for farmers' mutual companies to exempt these companies from using the State's standard fire insurance policy.

A difference of opinion exists as to the *term of years for which a policy should be written*. A small number of the farmers' mutual companies make their policies perpetual in form; and it is claimed that permanence is thus given to a company and the expense incident to renewals saved. But the value of a given farm risk changes with the addition of new and the deterioration of old buildings and the increase or decrease of stock and machinery, and therefore a policy usually requires from time to time such changes as make it in effect a new contract. There is also a danger that if there be no specific termination of a policy, the revaluation of the property concerned will be postponed so unduly as to produce over-insurance, and consequently a bad moral hazard. The duration of the policies issued by the farmers' mutual companies varies, when it is limited, from one to ten years, but is five years in the case of more than seven tenths of the companies.

It is very important, especially in the case of a new company insuring a comparatively small amount of risks, to *limit the amount of insurance* written on one building or on a group of buildings exposed to one fire. It is perhaps safe to say that no recently organized company should attempt to write more than \$2,000 on a single risk.

Some provision for *sharing liability* for the larger risks with one or more other companies should be made, if possible, by every company. According to the plan recommended two or more companies issue separate policies for specified amounts on the same risks, care being taken that the total amount of such policies is well within the value of the insured property. The issuing companies are practically independent of each other; hence there is no need for them to have that uniformity of method or approval of one another's methods which is necessary when one company reinsures another's risks.

From the point of view of the company the insurance written should be as specific as possible. The practice of writing *blanket insurance*, that is of allowing a variety of objects to be insured by the payment of a single lump sum, is unfair both to the company and to the members who have a small amount of property to insure. In extreme instances a man has insured all his personal property on several separate farms by a single sum of insurance, thus protecting it by a payment equal to 10 or 20 per cent. of its value. A number of the farmers' mutual companies have materially reduced their rate of assessment, and at the same time made assessments more just, simply by changing the plan of giving blanket insurance to that of specifically enumerating and valuing the various kinds of property covered by a contract.

A few farmers' mutual companies limit their *liability* for indemnity to three fourths of the value of the property affected, whether the loss be total or partial. Prevailing practice, which requires full indemnity up to the amount of the insurance carried to be paid in the case of partial losses, is however followed in the department's model by-laws; mainly because the more logical plan of three fourths liability runs a risk of incurring unfair competition. It offers an opportunity to agents of competing companies

to alienate members who have suffered a partial loss by pointing out to them that another company would have paid them a greater indemnity.

The liability of the insured is either limited or unlimited. When it is unlimited a member of an insuring company binds himself to pay his *pro rata* share of all the company's losses and legitimate expenses. Many persons have objected to this position although it is that imposed by about seven tenths of the successful companies. It is argued that the apparently impossible might come to pass, that a company might experience so many and such heavy losses that the consequent assessments would cause members who had not suffered loss by fire to go bankrupt. In fact however, when a farmers' mutual company takes a reasonable number of losses on separate farms, anything corresponding to a loss by conflagration is inconceivable. To this the only exception seems to be the case of a frontier community in which extensive prairie or forest fires are still possible.

Both the company and the insured should have the option of *cancelling* a policy. When it is cancelled on the initiative of the insured it is reasonable to charge him a short-term rate higher than the *pro rata* cost for the whole term of his policy. After such short-term rate has been deducted the balance of any advance charges he has paid should be returned to him. When however a policy is cancelled on the initiative of the company only, the *pro rata* cost of insurance for the time for which protection has been given should be deducted from any advance payments returned to the insured.

A reasonable policy or *membership fee* should be provided for in the by-laws. This fee is usually large enough at least to pay the representative of a company who receives applications and surveys risks.

Apparently many farmers' mutual companies at first levied *assessments* after each loss had been incurred and a few still adhere to this plan. It has however been found to be, in the case of fair-sized companies, needlessly burdensome to officers and needlessly expensive in that it necessitates repeated notifications and receipts to members. The members often find several calls on them in one year for small assessments to be troublesome. Other companies follow the plan of borrowing money with which to pay for losses as they occur, and levying at the end of a business year an assessment sufficient to pay the debt. An increasing number of the companies are however adopting the plan of requiring the prepayment of an initial premium at least equal to one year's average cost, and collecting at the beginning of each succeeding year for which the policy lasts an annual assessment in advance. Should it be found that funds have become exhausted some time before the next regular assessment is due, the management should not hesitate to make good the deficiency by levying a special assessment. It is important that the payment of all dues should be enforced in a business-like manner. Several companies have lost credit, and therefore members, because of their failure to levy assessments promptly and effectively.

With relatively few exceptions the farmers' mutual fire insurance companies in the United States have hitherto charged the same rate for all classes of farm property. There has been little material for a *classifi-*

cation. It has been argued that while, for example, a barn may involve a greater hazard of fire than a dwelling, each member, as a rule, owns a barn and a dwelling and there is therefore little injustice. It has been argued also that classification would involve an undesirable amount of additional work for the officers of a company, particularly for the secretary who would have to multiply the amount of insurance on each class of risk by its particular rate, and ascertain the sum of these products for each policy. In spite however of these arguments and the prevailing methods, there is, as we indicated in our previous article, an increasing and not decreasing tendency to differentiate among risks as a company progresses economically. The larger commercial companies, and such of the larger mutual companies as classify or select their risks, are making increased efforts to insure farm buildings so constructed as to reduce the risk of fire to a minimum. By making reasonable concessions when insuring in such cases a company encourages a farmer to improve his property by eliminating needless danger of fire. We will presently reproduce a suggested classification of farm property contained in the model by-laws drawn up by the United States Department of Agriculture.

There should be provisions for *arbitration* as to indemnities due. The cost of arbitration should be borne equally by the company and the insured.

The damage done to a property by fire or lightning often seems to the owner more serious than it really is. A provision that the company may satisfy a claim by building or repairing is therefore often valuable.

The question of whether a farmers' mutual insurance company should aim at establishing and maintaining a *reserve fund* leads to the question of how far it should imitate the plan now imposed by law upon all capital-stock insurance companies and, in general, larger mutual companies, the plan, namely, of maintaining a reserve proportionate to the amount of business transacted. The opinion seems to be growing among farmers' mutual companies that a reserve fund, collected by annual assessments, of about \$3,000 per million dollars of insurance in force is useful as a provision against crises.

§ 3. ESSENTIAL PROVISIONS OF THE MODEL BY-LAWS OF A FARMERS' MUTUAL FIRE INSURANCE COMPANY.

We think it useful to reproduce here the chief provisions of the model by-laws, drawn up by the Office of Markets and Rural Organization of the United States Department of Agriculture. They show the direction of the efforts of the government to encourage and guide this form of insurance.

"SECTION 2. *Property that may be insured.* — This company shall insure only farm or country property consisting of detached dwellings and their contents; farm buildings, including silos, and their contents; farm machinery; vehicles; grain and hay in bin, stack, or loft; and live stock; and detached risks of similar hazard within the corporate limits of cities or villages, not less than 100 feet distant from all other risks

in places lacking adequate fire protection, and not less than 50 feet distant in places having efficient fire protection: *Provided*, That no property of any class not considered reasonably safe by the board of directors or their representatives shall be insured: *And provided further*, That old and dilapidated structures, buildings wherein fire is used and the flues are defective or dangerous, paintings, jewelry, money, or securities or other evidences of ownership or of credit, shall in no case be insured by this company”.

“SECTION 9. *Special inspection of property*. — At least once every three years the property insured shall be thoroughly inspected by a competent person employed by the company as special inspector. Said inspector shall carefully examine the flues of all dwellings or other buildings wherein fire is used, note the placing and the condition of stoves and fire-places and the disposition of ashes therefrom, enquire into the system or method of lighting buildings, examine all lightning rods, and ascertain if fences are properly grounded. He shall take careful notice of any and all defects or dangerous practices. He shall also note the presence or absence of means of combating a fire, such as readily available water supply, or chemical extinguishers, and suitable ladders by means of which the top of the roof can be quickly reached. He shall advise with the insured concerning the general improvement of the risks, and shall recommend specific measures for the removal of conditions materially increasing the hazard thereof. He shall report to the company, upon blanks furnished him for that purpose, the condition of each member's risk or risks, together with the recommendations, if any, made by him for the removal of dangerous conditions. Refusal or neglect on the part of the insured to carry out specific recommendations of the inspector may, in the discretion of the board of directors or their representatives, be made cause for the cancellation of his policy or policies”.

“Section 10. b) *Limits to the amount of insurance*. — The directors of this company shall exercise due care to prevent the insurance of any property for more than three fourths or less than one half of the cash value of the property: *Provided*, That until the company has \$500,000 of insurance in force no single risk or group of property subject to one and the same fire shall be insured for an amount greater than \$1,500, nor shall such maximum single risk exceed \$2,000 until the company has \$1,000,000 of insurance in force, nor shall it later exceed two tenths of 1 per cent of the insurance in force: *And provided further*, That the insurance placed on live stock shall not exceed an amount per head of \$200 on horses, \$60 on cattle, \$15 on hogs, and \$10 on sheep”.

“h) *Sale of property and transfer of policy*. — The sale of insured property shall immediately suspend the insurance thereon, and unless application for transfer of the policy is received and accepted within 10 days after the date of sale, the policy shall be cancelled. A policy may be transferred or assigned by obtaining the consent of the company and paying a fee of 50 cents”.

" Section 12. *Fees and assessments.*

" a) *Policy fee and initial premium.* — A policy fee of \$1.50 and an initial premium to be fixed by the board shall be paid by the applicant, or satisfactory security for their payment shall be given by him, at the time of making application for insurance. For additional insurance a member shall be charged, in addition to the initial premium, a policy fee of 75 cents when the additional insurance applied for is \$500 or less, and \$1.50 when the sum applied for is greater than \$500.

" b) *Regular assessment.* — Not later than October 20 of each year the board of directors shall determine the rate of assessment for that year, basing such rate upon past experience as to the needs of the company. Said assessment shall be due on or before November 30 of the same year. Policies written on or after December 1 of the previous year and before June 1 of the current year shall be subject to the regular assessment of the current year and to three succeeding regular annual assessments. Policies written on or after June 1 of the current year and before December 1 of the current year shall be exempt from the regular annual assessment of that year, but shall be subject to four succeeding regular annual assessments.

" c) *Special assessments.* — Should unexpectedly heavy losses occur which cannot be met by the funds on hand, supplemented at the discretion of the board of directors by a sum not exceeding two tenths of 1 per cent. of the insurance in force, which may be borrowed, a special assessment shall be levied on all policies in force at the time of such loss or losses".

" Section 14. *Classification.* Property insured by this company shall be classified as follows, the contents of buildings taking the same classification as the building in which they are kept: *Provided*, That the board of directors shall have power to prescribe rules under which kinds of property not specifically hereinafter enumerated may be placed in one or the other of the following classes, or in additional classes created by the board.

Class A. — Brick or stone dwellings with roof of slate, metal, or other non-combustible material, when properly rodded against lightning.

Class B. — Brick or stone dwellings with wooden roof, when properly rodded.

Wooden dwellings with roof of non-combustible material, when properly rodded.

Unrodded brick or stone dwellings with roof of non-combustible material.

Class C. — Wooden dwellings with wooden roofs, when properly rodded.

Unrodded brick or stone dwellings with wooden roof.

Unrodded wooden dwellings with roof of non-combustible material.

Granaries, corn cribs, and hog houses located not less than 100 feet from the dwelling, nor less than 50 feet from the barn, such buildings being properly rodded in all cases where the insurance applied for is \$200 or more.

Live stock not pastured during the summer months except where all fences are properly grounded.

Class D. — Barns properly rodde.

Unrodde wooden dwellings with wooden roofs.

Granaries, corn cribs, and hog houses located nearer the dwelling or the barn than as specified for Class C, or lacking the lightning protection required for that class.

Live stock pastured during the summer months where fences are not properly grounded,

Class E. — Unrodde barns and other property deemed to be of similar hazard ”.

It is proposed that the coefficient representing the amount of risk attaching to each of these classes of property should be 15 for A, 20 for B, 25 for C, 33 for D and 40 for E.

MISCELLANEOUS INFORMATION RELATING TO INSURANCE AND THRIFT IN VARIOUS COUNTRIES.

CANADA.

AGRICULTURAL INSURANCE IN ALBERTA IN 1916. *Canadian Finance*, Vol. VIII,
No. 16, Winnipeg, 15 August 1917.

The following are some data as to the chief categories of agricultural insurance in Alberta and show the business in 1916 of the companies insuring live stock, and insuring against the injury done by tornadoes and by hail. The mutual fire insurance companies have not yet furnished reports.

I. Companies Insuring Live Stock 1916.

	Premiums	Indemnities
General Animals Insurance Company	4,396	1,015
Great North Insurance Company	8,284	3,673
Hartford Fire	200	—
Yorkshire Insurance Company	4,153	3,977
Total 1916 . .	17,033	8,665
Total 1915 . .	18,334	9,724

II. Companies Insuring against Tornadoes 1916.

	Premiums	Indemnities
Aetna Insurance Company	44	nil
Fidelity Phenix Insurance Company	124	nil
Firemen's Insurance Company of Newark	124	nil
German-American Insurance Company	44	nil
Hartford Fire Insurance Company	250	15
Home Insurance Company of New York	101	49
National Fire of Hartford	3	nil
National Union Fire Insurance Company	105	nil
New York Underwriters	104	nil
Nova Scotia Underwriters	40	nil
St. Paul Fire and Marine Insurance Company	165	85
Scottish Union and National Insurance Company	60	nil
Springfield Fire and Marine Insurance Company	163	7
Total 1916 . .	1,327	156
Corresponding totals for 1915	489	1,292

III. *Companies Insuring against Hail 1916.*

	Net Premiums	Indemnities	Expenses
Acadia Fire	622	nil	93
British Crown	112,416	101,721	45,718
British America	46,124	39,786	14,000 estimate
Canada Hail	44,171	42,782	13,200
Canada Security	233,320	180,792	54,212
Western Underwriters of			
Canada Security	30,195	18,365	5,048
Canada Weather	39,680	36,284	11,700
Connecticut	30,170	13,988	10,000 estimate
Dominion Fire	2,507	1,528	668
Excess Insurance Company	46,322	37,327	14,000 estimate
Great North	69,307	36,858	15,036
Hartford	27,351	29,480	8,223
Home Insurance Company	163,897	148,987	46,435
Nova Scotia Fire Under-			
writers	57,038	48,254	14,492
North Western National .	56,258	52,270	16,800 estimate
Rochester Underwriters .	35,388	30,478	11,764
St. Paul Mutual Hail . .	110,936	89,574	33,294
United Assurance Company	42,625	31,066	11,936
Westchester Fire	61,770	73,731	18,300 estimate
Winnipeg Fire Underwriters	27,253	16,713	6,821
Total 1916 . . .	1,237,350	1,029,984	351,740
Corresponding totals for			
1915	1,119,816	855,643	—

GERMANY.

1. THE DAMAGE CAUSED BY HAIL IN WURTEMBERG IN 1916. — *Wallman's Versicherungs-Zeitschrift*, 51st year, No. 89, Vol. II, Berlin, 16 August 1917.

Hail fell on thirty-seven days in 1916, and on thirty-three of these days it injured crops. All districts were attacked except those of Besigheim, Neckarsulm, Tuttlingen and Aalen, and 624 communes and parts of communes in the sixty districts. In ten districts and fifty-nine communes the damage caused by hail was such that there was an official valuation of losses with a view to a remittment of the land tax. The data as to losses thus obtained are as follows. The whole area which suffered measured

6,104 hectares as against an average of 4,853 hectares for the decade 1906 to 1915. The cash value of the losses reached 5,009,698 marks as against an average of 2,427,934 for the same decade. The average value of the losses incurred on a hectare of land under crops entirely destroyed was 821 marks, this average having been 500 marks from 1906 to 1915. The amount of land tax remitted was 8,037 marks. The districts which suffered most were those of Saulgau and Marbach, where the value of the losses was 3,702,085 marks or 73.9 per cent. of their total value.

* * *

2. A MEMOIR ON THE TRANSFERENCE TO THE STATE OF THE INSURANCE OF LIVE STOCK RAISED FOR SLAUGHTER. — *Illustrierte landwirtschaftliche Zeitung*, 37th year, No. 62, Berlin, 4 August 1917.

The Ministry of Agriculture and of the Domains and Forests of the Empire has remitted to the Prussian Chambers of Agriculture a memoir on the foundation of public institutions for the insurance of live stock kept for slaughter in the provinces of Prussia. The scheme will be realized by means of the Prussian federations concerned with trade in live stock. Owing to their public position in the trade in butchers' stock they have been obliged to supersede the farmer, in so far as his responsibility for the chief deficiencies in the stock he sells is concerned, in accordance with the *Gewährschaftsverordnung* (Guaranteeing Ordinance) of 27 March 1899. In virtue of their rules for interior administration they did in fact assume this responsibility. If they are now to receive the additional duty of assuming responsibility for the other deficiencies of butchers' live stock, following henceforth the principles of the technique of insurance, they will make another step towards transferring insurance of this kind to the State. The third and last stage will consist in transferring to the provincial or State administration the organization as it shall have been formed and financially consolidated by the activity of these federations concerned with trade in live stock.

The new insurance of butchers' live stock by the federations in this trade will easily work more profitably than that by private organizations. Costs of administration will reach at most a total of 10 per cent. of premiums in the case of the federations, whereas in that of private organizations 25 per cent. must be allowed for them.

When these federations are released from this duty care will be taken that the premium to be paid by the farmer be not increased and that their supplementary payments be not lacking. Their contribution will fall the more easily into line because it is equal to the product of the sums already engaged in the enterprise, leaving out the amount of the reserves passing to the new administration.

SWITZERLAND.

THE SWISS SOCIETY OF AGRICULTURE AND INSURANCE AGAINST THE ACCIDENTS OF AGRICULTURE IN 1916. — *Jahresbericht des Schweizerischen landwirtschaftlichen Vereins* 1916. Brugg, 1917.

The yearly report of the Swiss Society of Agriculture for 1916 (1) has just appeared. Before we notice, as we have done in previous years (2), the matter in this report especially concerned with insurance against the accidents of agriculture, we will give some facts regarding this society.

It was founded in 1863 and arose from the fusion of the Society of Swiss Agriculturists and the Swiss Central Society of Agriculture. It is concerned with the general interests of agriculture and is responsible for the distribution of federal subsidies. It practises some special forms of activity, such as insurance against accidents, the experimental organization of cultures, the importation of hogs, etc. Its organ is the "Schweizerische landwirtschaftliche Zeitschrift".

At the end of 1916 it comprised twenty-nine sections and 62,390 members. At the end of 1915 the members numbered 60,967; and the increase in the ensuing year was therefore one of 1,423. The Federation of Swiss Goat-keeping Consortia left the society on 31 December 1914 but rejoined it on 9 December 1916; and therefore the Federation of the Goat-keeping Consortia of Zurich, which joined the society in 1915, no longer appears as an independent branch.

* * *

As regards insurance against the accidents of agriculture we should note that while in the two years before 1916 a continuous diminution is found in the number of insured persons, in 1916 insurance again began to increase to a remarkable degree.

In 1916 there were insured:

4,403 men,
113 women,

in all 4,516 persons, of whom 1,035 were employers, 444 members of families (417 men and 27 women) and 3,037 employees and journeymen labourers (2,951 men and 86 women). In addition 491 farms were insured. The total number of the insured was thus 5,007 as against 4,829 in 1915, giving an increase of 178.

(1) *Jahresbericht des Schweizerischen landwirtschaftlichen Vereins*, 1916, Brugg, 1916, pp. 59.

(2) See for the report for 1915 our issue for October 1916.

As regards the duration of insurance :

3,790 insurances were for 12 months				
413	"	"	9	"
328	"	"	6	"
62	"	"	3	"
414	"	"	2-1	" (journeymen labourers).

Altogether 97,294.10 francs were paid for premiums and supplements for medical and pharmaceutical expenses.

Accidents numbered 541 and the victims were distributed as follows : 176 employers, 29 members of families, and 336 servants, journeymen workmen and other employees.

Of these 541 accidents, 428 were verified during 1916 and the society disbursed for them, on indemnities and medical expenses, 55,402.65 francs. For the 119 cases still pending 36,600 francs have been reserved. Expenses of administration amounted to 11,945.50 francs.

In 1916 the question of a voluntary union with the Swiss Institution of Insurance against Accidents could not be decided owing to the war. For the same reason this institution had to put off indefinitely the beginning of its labours. The reaction of the war on the economic life of the country both prevented the cantons in which the Swiss Society of Agriculture is active from introducing compulsory insurance against sickness, and prevented the agriculturists of the federations which unite in their society from founding special rural agricultural sickness funds.

Part III: Credit

RUSSIA.

THE ACTIVITY OF THE PEASANTS' LAND BANK (*Conclusion*).

§ 5. THE ADMINISTRATION OF THE BANK'S PROPERTY.

In 1915 the bank administered 2,621,640 deciatines (1) of land, distributed as follows according to the method of their administration.

TABLE XV. — *Distribution of Lands Administered by the Peasants' Land Bank according to the Method of Administration.*

System of administration	Properties bought by the peasants — deciatines —	Properties emanating from the crown — deciatines —	Properties expro- priated because of unextin- guished mortgages — deciatines —	Total — deciatines —	Percentage of total —
1. Properties { a) to peasants . . let for rents in cash . . { b) to contractors .	883,007	762,203	127,863	1,773,073	61.9
2. Properties let to peasants for rents partly payable in kind	50,363	95,544	5,311	151,218	5.3
3. Properties administered by their former proprietors . .	18,837	1,418	2,486	22,741	0.8
4. Properties administered by the bank directly	40,518	405	—	40,923	1.4
	701,513	61,382	72,625	835,520	24.2
Total . . .	1,731,877	922,621	208,956	2,863,454	100.0

As appears from this table the method of administering the lands preferred is that of letting them to the peasants, to whom 1,795,814 deciatines were thus ceded. In letting lands the bank first considers the peasants

(1) 1 deciatine = 2.698 acres.

who need them. Most frequently a lease does not last beyond the harvest for longer leases would interfere with the bank's enterprise of selling properties which it is pursuing with success.

The extent of the woods owned by the bank was 657,439 deciatines on 1 January 1915 and yielded a profit of 3,963,878 roubles (1) in which payments made in previous years for woods sold were included.

It should be noted that the profits derived from the bank's lands were 5,823,361 roubles, or 4.1 per cent. of the capital spent on buying properties, as against 4.6 per cent. in 1914 and 4.4 per cent. in 1913.

§ 6. THE BANK'S LOANS TO PEASANTS FOR THE PURCHASE OF LANDS BELONGING TO INDIVIDUALS.

The bank's intervention in sales of land by individuals lessened noticeably in 1915 even as compared with 1914. Requests for loans numbered only 2,456 as against 11,387 in the previous year. The loans granted numbered 5,720 as against 12,798 in the previous year.

In its third period of activity these operations of the bank were as follows :

(1) 1 rouble = about 2s 1 ½ d. at par.

As appears from this table 5,239,234 deciatines were bought by the peasants with the help of the bank. The bank lent to the purchasers 554,774,555 roubles secured by mortgages of the land. The greater part of this enormous area was bought from the hereditary nobility, who constituted the following percentages of the sellers of land :

TABLE XVII. — *Percentages of Sellers formed by Nobles.*

1908	1909	1910	1911	1912	1913	1914	1915
77.5	75.8	74.9	73.4	69.8	71.7	65.4	55.5

In this as in preceding years applications were received from individuals who wished to sell their land to the peasants, and wished it to be organized as *outroub* and *houlor* before it was sold.

In the third period 1,112 applications were made, covering an area of 559,396 deciatines, out of which 667 properties having an area of 243,790 deciatines and a total value of 37,956,242 roubles were organized.

The following table gives a complete idea of these transactions :

TABLE XVIII. — *Preparation of the Lands of Proprietors for Sale to the Peasants.*

Year	Applications of individuals for sale of their lands to the peasants		Approved schemes for the division of lands into <i>houlor</i> and <i>outroub</i>		Land divided into <i>houlor</i> and <i>outroub</i> for sale to peasants								Total value estimated by the Bank of Agriculturists — roubles
					Relation between total area and area of <i>houlor</i> and <i>outroub</i>								
	Number of applications	Total area of lands — deciatines	Number of properties	Area — deciatines	Number of properties	<i>Houlor</i>		<i>Otroub</i>		In collective property — deciatines	Area of divided property — deciatines		
						Num-ber	Area — deciatines	Num-ber	Area — deciatines				
1909 . . .	199	153,538	84	53,474	42	633	7,341	679	8,557	717	16,615	1,667,928	
1910 . . .	354	139,859	277	22,657	201	1,751	22,514	5,121	42,785	3,717	69,016	11,886,146	
1911 . . .	212	121,116	173	76,363	198	2,172	31,082	4,263	34,905	2,681	68,668	11,035,504	
1912 . . .	114	41,151	84	27,312	89	1,306	20,079	1,678	12,423	588	33,090	4,707,666	
1913 . . .	133	52,770	96	32,265	78	760	13,629	1,229	10,085	535	24,249	3,011,910	
1914 . . .	86	44,515	62	25,293	41	506	9,500	962	7,684	822	18,006	2,888,952	
1915 . . .	14	6,647	12	5,789	18	534	8,495	395	4,239	1,352	14,086	2,728,130	
Total	1,112	559,396	788	295,153	667	7,462	112,640	14,327	120,698	10,412	243,790	37,956,242	

These lands were sold to the following categories of purchasers :

TABLE XIX. — *Categories of Purchasers.*

Categories	Percentage of total sum of loans granted to each category									
	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915
Individuals	18.7	18.5	28.4	62.1	76.1	82.8	82.9	80.8	76.1	73.2
Rural Societies	68.3	66.2	60.4	34.7	22.3	16.4	16.2	18.4	23.0	25.6
Rural Communes	13.3	15.3	10.7	3.2	1.6	0.8	0.9	0.8	0.9	1.2

Categories	Percentage of total area of lands bought by each category.									
	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915
Individuals	1.5	1.6	3.8	10.4	19.6	30.3	35.2	35.2	31.9	28.4
Rural Societies	63.4	60.7	68.8	76.1	64.9	63.3	59.8	59.7	64.1	63.5
Rural Communes	35.1	37.7	27.4	13.5	15.5	6.4	5.0	5.0	4.1	8.1

As is seen from this table the number of transactions with individuals increased progressively as did also the area sold as private property. But the peasants, being much freer in their purchases, prefer to buy property which they can make collective. At the bank's request they determine in detail the share belonging to each member of a society so formed.

Most of the land sold to peasants as private property was in the form of lots largely in excess of the average area of peasant holdings, both in all Russia and in its various districts. Thus the following table shows that more than half the purchases were of areas of from ten to fifty deciatines.

TABLE XX. — *Percentage of Lands Bought belonging to the Various Categories of Area.*

Year	Up to 10 deciatines	From 10 to 20 deciatines	From 20 to 50 deciatines	More than 50 deciatines	Total
1910	29.0	25.2	30.3	5.5	100.0
1911	35.9	32.1	28.9	3.1	100.0
1912	33.9	29.9	31.1	5.1	100.0
1914	26.3	31.1	38.9	3.8	100.0
1915	23.5	30.0	43.1	3.4	100.0

During the third period loans amounting to 885,679,291 roubles were granted and were used to buy 7,979,570 deciatines.

TABLE XXI. — *Loans for the Purchase of Properties.*

Loans for the Purchase of Lands of Individuals			
Year	Number of applications for loans	Total area of bought land — deciatines	Amount of loans granted — roubles
1905	3,263	396,403	31,031,405
1906	3,115	522,751	54,309,290
1907	5,379	932,849	107,831,578
1908	19,377	1,019,014	116,283,714
1909	50,719	1,227,114	144,497,534
1910	69,710	1,549,720	169,558,320
1911	24,778	717,979	73,319,710
1912	20,567	545,626	54,926,610
1913	18,015	484,023	9,096,2204
1914	12,798	383,331	38,142,040
1915	5,720	200,760	16,682,870
Total	223,441	7,979,570	885,679,291

§ 7. MORTGAGES ON LANDS BOUGHT WITHOUT THE HELP OF THE BANK OF AGRICULTURISTS.

During 1915 there were made to the bank 378 applications for loans for lands bought without its aid, for the payment of mortgages amounting to 1,710,311 roubles. The number of applications was four times less than in 1914 and the area they concerned three and a half times less.

The bank was able to lend 1,312,270 roubles on mortgages on 16,217 deciatines of the value of 1,931,860 roubles.

In the third period loans granted to pay debts burdening land bought without the bank's help amounted to 50,085,773 roubles secured by mortgages on 695,190 deciatines.

TABLE XXII. — *Mortgages on Lands Bought without the Bank's Help.*

Year	Total number of loans	Total area of mortgaged lands	Loans granted Roubles
1896-1901	1,530	142,632	7,250,893
1906	86	6,631	451,910
1907	234	19,914	1,738,470
1908	937	40,078	3,763,065
1909	1,849	76,294	5,513,545
1910	2,603	117,840	8,792,370
1911	2,557	101,356	7,591,580
1912	1,996	81,037	6,628,120
1913	1,758	62,931	4,928,510
1914	1,043	35,225	2,902,690
1915	174	5,802	516,650
Total . . .	14,787	695,190	50,085,775

§ 8. MORTGAGES ON NADIEL LANDS.

The activity of the bank in its third period is closely connected with the law of 15 November 1906 which allowed loans to be granted secured by mortgages on the *nadiel* lands which had previously been inalienable.

Many hopes were founded on this law. It was thought that the power to mortgage *nadiel* lands would give a strong impulse to colonization in Siberia, in that it would furnish money to peasants wishing to move to other districts, and that it would encourage the improvement of land, increase purchases, and intensify the movement of property.

But this law did not in fact have a wide application. In 1915 there had been 1108 applications for loans for a sum of 1,379,530 roubles secured by 14,658 deciatines of land. The bank approved 930 of these loans for a sum of 851,520 roubles, and 11,507 deciatines, worth 1,571,356 roubles, were mortgaged.

In the third period 9,720 loans were made of a sum of 10,948,770 roubles, and 284,712 deciatines were mortgaged, as appears in the following table :

TABLE XXIII. — *Loans on Nadiel Lands from 1907 to 1915.*

Year	Number of loans	Area of mortgaged lands — deciatines	Sums lent — roubles
1907	47	32,164	504,570
1908	153	36,150	765,060
1909	952	53,945	1,089,050
1910	1,113	45,659	1,213,080
1911	1,083	23,437	1,116,350
1912	1,383	23,940	1,078,400
1913	1,736	28,416	1,755,910
1914	2,170	25,409	2,346,360
1915	1,078	15,636	1,079,920
Total . . .	9,720	284,752	10,948,700

It is interesting to distribute the loans according to their objects, as these were declared in the applications made to the bank. As appears in the following table the largest sum, namely 3,388,440 roubles, was intended for the purchase of lands; a less sum — 1,674,930 roubles — for the conversion of collective into private property; and only 655,030 roubles for the improvement of the cultivation of the lands.

TABLE XXIV. — *Objects for which Loans were Requested.*

Year	Purchase of nadiel of peasants moving elsewhere			Establishment of houlor			Agricultural improvements			Total		
	Num- ber of loans	Total area of mort- gaged lands — deciatines	Amount of loan — roubles	Num- ber of loans	Area of land — deciatines	Amount of loans — roubles	Num- ber of loans	Area of land — deciatines	Amount of loans — roubles	Num- ber of loans	Area of land — deciatines	Amount of loans — roubles
1907 . .	16	2,320	21,120	31	29,841	483,450	—	—	—	47	32,164	504,570
1908 . .	78	20,493	362,060	35	15,171	395,000	40	486	8,000	153	36,150	765,060
1909 . .	541	34,970	646,890	203	15,883	377,060	208	3,083	65,100	952	53,945	1,089,050
1910 . .	517	36,287	932,470	282	5,957	174,760	314	4,415	104,850	1,113	45,659	1,213,080
1911 . .	554	12,883	781,130	42	2,397	95,930	487	8,153	239,290	1,083	23,433	1,116,350
1912 . .	627	5,872	508,950	36	4,338	137,460	427	7,335	220,370	1,087	17,549	866,780
1913 . .	147	3,535	100,780	6	234	10,670	47	731	13,470	206	4,500	124,920
1914 . .	13	289	29,490	—	—	—	16	152	3,750	29	441	33,240
1915 . .	9	53	4,550	—	—	—	1	9	200	10	62	4,750
Total .	2,602	116,714	3,388,440	6,351	73,821	1,674,330	1,537	23,368	655,030	4,674	213,903	5,177,800

In addition loans for a sum of 5,230,900 roubles were granted under the law of 1912. During four years 1660 loans amounting to 2,002,740 roubles were granted and the mortgages affected 15,435 deciatines. For the amortization of debts contracted in buying lands without the bank's support 496 loans amounting to 415,240 roubles were made and 4,574 deciatines were mortgaged. For the purchase of lands with the bank's support 215 loans, amounting to 554,610 roubles, were made and were secured by mortgages on 10,795 deciatines. In addition there were 503 loans, amounting to 918,310 roubles and secured by mortgages on 8,041 deciatines for the purchase of *nadiels*. For the establishment of *houters* there were 2,112 loans amounting to 1,340,000 roubles and secured by mortgages on 31,004 deciatines. Thus from 15 November 1906 to 1 January 1916 loans numbered 9,720 amounted to 10,948,700 roubles and involved the mortgaging of 283,752 deciatines of *nadiel* land.

The sum of 655,030 roubles granted for agricultural improvements should be noticed. It is relatively small but it represents a new direction in which the bank's activity has been applied since the first and second periods. Until this third period the insufficient area belonging to the peasants — an insufficiency which was already being combated — found no compensation in an attempt to increase production. The bank's attention was given almost entirely to selling land to the peasants. It was in the third period that measures were taken to realize this new aim, a fact explained by the necessity of restraining the liquidation of lands belonging to individuals. It was necessary to satisfy the peasants not only by increasing the area of their land but also by intensifying its production.

§ 9. TOTAL RESULTS OF ALL THE BANK'S LENDING TRANSACTIONS.

In the whole period of its activity the bank has made 398,030 loans for a total sum of 1,518,335,649 roubles, secured by mortgages on 17,737,198 deciatines of the total value of 1,894,758,033 roubles.

These loans were distributed as follows: 312,051 of 494,819,599 roubles were made to proprietors and secured by mortgages on 4,244,449 deciatines valued at 575,453,558 roubles; 75,668 of 799,682,267 roubles, secured by mortgages on 10,391,422 deciatines valued at 1,052,751,439 roubles, were to co-operative societies; and 10,291 of 226,883,783 roubles, secured by mortgages on 3,101,327 deciatines valued at 266,553,036 roubles, were to rural communities. Thus 23.9 per cent. of these loans went to individual landowners, 58.1 per cent. to co-operative societies and 17.5 per cent. to rural communities.

The relatively small percentage representing the loans to individuals is a result of the bank's method before its third period of activity. In its third period individuals had the first place; for from 1911 to 1915 there passed into private ownership 2,517,653 deciatines, or 59.3 per cent. of the total area bought by the bank in the whole period for which it had been active, namely from 1885 to 1915.

§ 10. ECONOMIC POSITION OF PEASANTS ACQUIRING LAND FROM THE BANK
OR FROM INDIVIDUALS BY MEANS OF THE BANK.

An analysis of the economic position of the peasants at the time they buy lands belonging either to the bank or to individuals is of the highest interest.

In 1915 the position of the peasant purchasers of the bank's lands was as follows:

TABLE XXV. — *Economic Position of the Peasant Purchasers of the Bank's Lands.*

Economic Position	Purchasers of the Bank's Lands							
	Number				Percentage			
	Total	Indi- vidu- als	Co-ope- rative societies	Rural commu- nities	Total	Indi- vidu- als	Co-ope- rative societies	Rural commu- nities
without lands	2,102	1,801	125	176	18.6	28.1	10.7	4.8
having less than 1.5 deciatines	1,792	859	182	751	15.9	13.4	15.6	20.3
having from 1.5 to 3 deciatines	1,704	1,017	174	513	15.1	15.9	14.9	13.9
having from 3 to 6 deciatines	2,205	1,264	212	729	19.6	19.7	18.0	19.7
having more than 6 deciatines	3,471	1,469	476	1,526	30.8	22.9	40.8	41.3
having less than 3 deciatines	5,678	3,677	481	1,440	49.6	57.4	41.2	39.0
having more than 3 deciatines	5,676	2,733	688	2,255	50.4	42.6	58.8	61.0
Total	11,274	6,410	1,169	3,695	100.0	100.0	100.0	100.0

This table shows that most of the purchasers were landless purchasers or owners of small lots.

The following table shows their position in the third period of the bank's activity more clearly and year by year.

TABLE XXVI. — *Percentages of the Purchasers of the Bank's Lands in Stated Economic Positions from 1906 to 1915.*

Economic Position	1906	1907	1909	1910	1911	1912	1914	1915
without land	18.6	13.2	19.7	18.8	24.5	19.1	18.2	18.6
less than 1.5 deciatines	27.3	38.5	16.6	17.0	13.1	13.2	13.1	15.9
from 1.5 to 3 deciatines	15.1	29.8	19.9	17.8	16.5	16.8	14.9	15.1
from 3 to 6 deciatines	21.1	14.7	23.4	23.3	22.2	23.0	22.8	19.6
more than 6 deciatines	17.9	3.8	20.4	26.1	23.7	25.9	31.0	30.8
less than 3 deciatines	61	81.5	56.2	50.9	54.1	51.1	46.2	49.6
more than 3 deciatines	39	18.5	43.8	49.1	45.9	48.9	53.8	50.7

Unfortunately, as the statistics of the zemstvos show, these data do not represent the real position of the purchasers or their true economic resources. Many peasants are in easy circumstances because while they own only very little land they lease other land. Statistics as to live stock, and especially as to animals employed on field-work, also do not allow of exact conclusions, for a system exists very commonly of tilling leased land with animals belonging to the owner. The data are however those which come nearest to expressing the economic position of the peasants who acquire the lands. The following table shows the measure in which the peasants are able to cultivate the land they buy with their own resources.

TABLE XXVII. — *Resources in Live Stock of Purchasers of the Bank's Lands.*

Puchasers	Total number of peasant purchasers	Percentage of purchasers having					Total live stock of purchasers				Average live stock of purchasers		
		no live stock	no draught animals	horses			horses	cattle	cows	sheep	draught animals	cows	sheep
				1	2	3 & more							
changing their place of residence	6364	5.9	8.8	34.1	29.2	22.0	10 718	1,410	11,688	34,665	211	195	579
not changing their place of residence	4910	6.3	5.1	26.9	36.6	25.1	9,418	1,029	9,853	27,949	228	214	608
such of above as change within the same province	3733	4.9	4.5	28.2	36.8	25.0	7,226	864	8,022	24,635	227	226	680
change to another province	1177	10.9	6.8	22.7	36.0	23.6	2,192	165	1,831	3,814	235	175	364

It appears from this table that the total number of the purchasers having live stock is much superior to that of the landless purchasers, and this confirms our previous statement, and allows the conclusion that most of the lands passed to peasants whose prosperity was above the average.

The position would be more clearly shown if we could give data showing not the land and live stock owned but the area cultivated by the purchasers.

The total number of peasants who, with the bank's support, bought land from individuals was 32,108, and of these 3,820 or 11.9 per cent. had previously no land. The 28,988 others owned 205,038 deciatines or an average of 7.2 deciatines for each purchaser.

TABLE XXVIII. — *Economic Position of the Purchasers of Land of Individuals.*

Economic Position	Purchasers of lands belonging to Individuals							
	Number				Percentage			
	Total	Indi-viduals	Co-ope-rative societies	Rural commu-nities	Total	Indi-viduals	Co-ope-rative societies	Rural commu-nities
without land	3,820	1,125	2,522	173	11.9	26.9	12.4	2.3
less than 1.5 deciatines	2,433	240	1,383	810	7.6	5.7	6.8	10.8
from 1.5 to 3 deciatines	4,248	428	2,708	1,112	13.2	10.2	13.2	14.8
from 3 to 6 deciatines	9,358	844	5,402	2,112	29.1	29.1	26.5	41.4
more than 6 deciatines	12,249	1,550	8,394	1,305	38.2	37.0	40.1	31.6
less than 3 deciatines	10,501	1,793	7,013	2,095	32.7	42.8	32.4	27.9
more than 3 deciatines	21,607	2,394	13,796	4,417	67.3	57.2	67.6	72.1
Total	32,108	4,187	20,409	5,512	100.0	100.0	100.0	100.0

These figures do not, any more than those of the preceding table, give an entirely exact picture of the position. They give an exaggerated idea of the number of needy peasants, as does also the table which covers the whole of the third period.

TABLE XXIX. — *Percentages of the Purchasers of the Land of Individuals in Stated Economic Positions from 1906 to 1915.*

Economic Position	1906	1907	1909	1910	1911	1912	1914	1915
without land	9.4	8.2	9.2	11.6	13.1	12.2	13.0	11.9
less than 1.5 deciatines	33.2	41.2	9.9	10.3	10.3	9.6	6.7	7.6
from 1.5 to 3 deciatines	30.5	33.3	17.4	18.5	17.4	14.7	13.1	13.2
from 3 to 6 deciatine	19.9	13.9	28.7	27.7	27.1	26.3	25.7	29.1
more than 6 deciatines	6.9	3.4	34.8	32.9	32.1	37.2	41.5	38.2
less than 3 deciatines	73.2	82.7	36.5	39.4	40.8	36.5	32.8	32.7
more than 3 deciatines	26.8	17.3	63.5	60.6	59.2	63.5	67.2	67.3

It is a fact of the highest interest that among purchasers of lands the number of well-to-do peasants increases progressively. The bank's support goes more and more to peasants who represent economically the average peasant middle class.

Not only does the bank prefer to aid peasants in comparatively easy circumstances, but its help tends to form a true peasant middle class.

Thus, as the following table shows, the economic position of the buyers was radically changed after their purchase of lands.

TABLE XXX. — *New Position of Purchasers of the Bank's Lands.*

Area belonging to the peasants after their purchases of the bank's lands							
Year	less than 1.5 deciatines %	less than 3 deciatines %	less than 6 deciatines %	less than 9 deciatines %	less than 15 deciatines %	less than 25 deciatines %	more than 25 deciatines %
—							
1909	1.8	5.2	14.2	16.6	28.5	18.7	5.9
1910	2.3	4.1	9.7	12.7	31.0	28.7	11.5
1911	2.1	2.8	9.4	12.4	24.8	31.5	17.0
1912	2.4	4.1	11.4	12.5	26.4	29.2	14.0
1913	4.1	3.2	9.7	11.2	21.4	30.0	20.4
1914	3.0	2.3	9.9	12.3	20.1	30.4	22.0
1915	5.0	7.1	9.3	10.8	19.6	28.4	19.8

It follows from this table that the percentage of the buyers whose economic position brings them near the true rural middle class increases progressively. We cannot but recognize that the bank has succeeded in forming this new class of society, on which the government thought it could count as on the support of order and of the preservation of existing conditions.

The same deduction can be made from the table which gives the total area belonging to peasants after they had, by means of the bank's support, bought lands belonging to individuals. The percentage and number of peasants who thus become members of the rural middle class increases progressively, although the percentage is slightly less than that of the peasants who have reached this position by buying lands from the bank directly.

TABLE XXXI. — *New Position of Purchasers of Lands belonging to Individuals.*

Area belonging to peasants after their purchases of lands from individuals							
Year	less than 1.5 deciatines %	less than 3 deciatines %	less than 6 deciatines %	less than 9 deciatines %	less than 15 deciatines %	less than 25 deciatines %	more than 25 deciatines %
—							
1909	2.1	6.4	18.0	18.9	25.3	13.2	25.1
1910	2.4	6.8	19.8	21.5	29.8	14.1	5.6
1911	1.6	5.4	19.2	21.4	28.1	16.9	7.4
1912	2.1	5.4	18.9	20.0	28.1	17.3	8.2
1913	1.8	5.2	19.8	21.2	31.0	19.8	1.2
1914	1.7	5.0	18.0	22.2	27.5	17.0	8.6
1915	1.4	5.3	22.4	18.6	25.2	17.4	9.7

§ II. POSITION OF MORTGAGE DEBTS AND THEIR AMORTIZATION.

The total mortgage debt on 1 January 1915 was 1,386,452,474 roubles and was secured by 408,000 mortgages. On 1 January 1916 it was 1,398,224,506 roubles, secured by 525,950 mortgages.

The sum of the amortization quotas to be received in 1915 was 67,934,219 roubles. To this 33,685,005 roubles for overdue quotas had to be added, and thus a total of 101,619,224 roubles was reached. However only 54,439,005 roubles were actually received, and on 1 January 1916 arrears reached the total of 46,525,365 roubles or 68.5 per cent. of the quotas falling due in the year.

During the year a moratorium was granted for the payment of the amortization quotas in the invaded provinces or the territories in which payment was considered impossible, namely in the provinces of Vilna, Kovno, Grodno, Lublin, Keltze, Petrokov, Suvalki, Cholm, Kalish, Plotsk, Varsovia, Lomja, Rafom, Minsk, Kurland, Livonia, and parts of the provinces of Podolsk and Volhynia.

As necessity has arisen the bank has also granted facilities to its debtors in the rest of Russia, namely in 3,475 cases and for a sum of 590,035 roubles.

From 1910 to 1915 delays were granted as follows :

TABLE XXXII. — *Facilities granted for the Payment of Amortization Quotas falling due from 1910 to 1915.*

Year	Number	Sum for the payment of which a delay was granted
—	—	roubles
1910	190	25,883
1911	201	44,672
1912	571	94,168
1913	847	119,834
1914	2,875	470,172
1915	3,475	590,035

It follows from this table that in 1915 the number of cases in which facilities were granted surpassed by 20 per cent. the corresponding number in 1914 and was four times as great as the corresponding number in 1913. The consequences of the war brought about a sudden increase in the payments not made. Already before the war they were increasing but only very slowly.

We should note that the sum of 590,035 roubles does not represent the total overdue payments of amortization quotas. We should add to it six million roubles, due as arrears, but suffered by the bank to lapse to its debtors.

The complete extinction of mortgage loans which reached their term of repayment was very little accomplished in 1915. Hardly 69 loans, secured by mortgages on 2,396 deciatines and amounting to 86,216 roubles, were extinguished. From 1907, the first year in which mortgage loans became repayable, onwards, the movement towards the extinction and redemption of mortgages was as follows :

TABLE XXXIII. — *Position as regards the Extinction of Mortgage Debts from 1907 to 1915.*

Year	Number of loans becoming repayable	Area of mortgaged lands — deciatines	Total amount of loans — deciatines
1907	148	27,897	383,198
1908	—	—	—
1909	3	521	20,466
1910	19	1,857	35,956
1911	196	53,201	614,294
1912	52	2,591	120,810
1913	63	3,652	133,570
1914	64	5,101	149,048
1915	69	2,396	86,216

During the bank's third period 614 loans secured by 97,216 mortgaged deciatines and amounting to 1,543,558 roubles were extinguished.

During twenty years loans completely repaid in various ways freed 509,693 deciatines mortgaged for a total sum of 21,780,361 roubles. Repayment took place as follows in the different years:

TABLE XXXIV. — *Distribution of Repayments of Loans from 1896 to 1915.*

Year	Complete Extinction			Partial Extinction			Total	
				By redemption of mortgage			Without redemption of mortgage	
	Number of properties	Area — deciatines	Sum repaid — roubles	Number of properties	Area — deciatines	Sum repaid — roubles	Number of cases	Sum paid
1896	81	15,990	151,300	272	—	180,627	—	—
1897	111	22,373	130,961	7	913	4,169	415	269,095
1898	171	36,072	304,366	15	486	17,134	457	307,532
1899	172	31,921	350,556	14	363	20,071	545	416,961
1900	132	11,518	234,230	26	494	31,934	573	465,420
1901	125	13,956	225,174	18	590	10,970	745	429,158
1902	139	29,432	267,308	32	691	24,307	630	483,187
1903	187	15,018	668,118	27	163	13,863	627	498,020
1904	155	13,321	332,082	42	2,565	95,192	673	525,516
1905	112	14,319	136,455	55	393	31,431	584	462,176
1906	106	8,668	197,015	28	501	30,689	461	406,033
1907	123	9,910	84,340	49	1,603	94,107	969	429,006
1908	138	11,410	148,099	71	3,574	76,266	485	643,962
1909	173	28,410	234,273	56	1,146	51,641	735	643,962
1910	342	36,959	653,857	39	2,740	78,257	1,738	992,352
1911	454	39,311	855,032	74	899	92,407	2,419	944,411
1912	754	47,122	1,161,738	123	376	115,334	2,360	1,076,028
1913	909	36,831	1,113,143	165	1,502	123,218	3,115	1,077,460
1914	725	36,831	908,172	106	567	56,897	2,674	876,446
1915	474	29,676	795,346	101	402	53,271	2,519	883,772

§ 12. RENEWALS.

In 1915 debts were renewed in 178 cases and there were granted in supplementary loans 172,857 roubles, distributed as follows :

TABLE XXXV. — *Distribution of Complementary Loans.*

Categories of borrowers	Number of cases	Area — deciatines	Principal debt — roubles	Renewed debt — roubles	Complementary debt — roubles	Total — roubles
proprietors	159	2,295	193,390	186,754	76,955	263,710
co-operative societies, . .	19	5,810	680,590	667,668	95,901	763,570
Total	178	8,105	873,908	854,422	172,857	1,027,280

In the period 1909-1915 the renewals of the complementary loans granted were as follows :

TABLE XXXVI. — *Renewal of Grants of Loans from 1909 to 1915.*

Year	Number of cases	Area — deciatines	Principal debt — roubles	Renewal — roubles	Complementary loan — roubles	Total — roubles
1909	35	12,336	1,036,980	982,599	142,799	1,125,390
1910	55	9,785	637,186	625,159	90,920	716,080
1911	379	27,408	2,413,370	2,321,716	348,443	2,670,160
1912	212	32,059	3,015,600	2,961,339	432,290	3,393,630
1913	416	38,007	2,362,519	2,272,733	483,686	2,756,420
1914	298	20,878	1,725,910	1,691,406	344,773	2,036,180
1915	178	8,105	873,980	854,422	172,857	1,027,280

Thus it appears that the number of renewals was quite negligible and could not influence the bank's transactions with peasants.

§ 13. — DEBTS AND RESOURCES OF THE BANK.

The amount of the bonds issued by the bank was on 1 January 1916 as follows :

394,397,500	roubles at 4	per cent.
439,491,350	"	" 1 1/2 "
497,830,500	"	" 5 "
4,300	"	" 5 1/2 "
3,989,394	"	" 6 "

We must add to this sum 178,047,604 roubles, being the bank's initial debt emanating from the agricultural banks. The total sum is therefore 1,513,760,548 roubles.

During the year the bank issued new bonds at 5 per cent. for a sum of 987,300 roubles and at 4 $\frac{1}{2}$ per cent. for a sum of 31,836,650 roubles. The initial debt emanating from the agricultural banks reached 4,449,405 roubles. In addition bonds were repaid for a sum of 16,901,586 roubles, 1,260,750 roubles were paid to extinguish debts, and debts were bought back for 420,000 roubles. The initial debt emanating from the agricultural bank was repaid to the extent of 925,300 roubles. On 1 January 1916 the sum of bonds was 1,533,468 roubles.

The bank's capital on 1 January 1915 was as follows, in respect of amount and kind: the bank's own capital — 10,200,064 roubles; the reserve capital 28,212,236 roubles; the capital of Emperor Nicholas II 3,859,700 roubles.

During the year the bank's own capital did not change; the reserve capital reached 32,529,096 roubles; and the capital of the Emperor Nicholas II was increased by 818,050 roubles, a sum representing sales of crown property. The total capital was therefore 4,671,750 roubles on 1 January 1916.

The closing of the financial year therefore provided the following figures:

Receipts	24,164,141 roubles	
Expenditure	19,847,281	"
which gave	4,316,860	" as a net profit.

This sum passed in its entirety to the reserve.

*
* *

In concluding our examination of the bank's activity in its third period we should recognize that it was responsible for enabling land to pass without disorder into the ownership of the peasants, that in pursuing its aim of liquidating large property it was of real benefit to the peasants, but that it could not solve the whole agrarian problem. In this third period the bank's objective changed. It no longer sought to accomplish only the transference of lands but also worked for a great and methodical reform of the agricultural masses. It could not attain to really positive results because above economic questions there is the political question involved in the tendency to reduce the *mir* — that traditional form of peasant property — and this prevents certain reforms from being fully realized.

MISCELLANEOUS INFORMATION RELATING TO CREDIT IN VARIOUS COUNTRIES.

EGYPT.

THE "CRÉDIT FONCIER ÉGYPTIEN" (*Egyptian Land Credit*) IN 1915-1916. — *La revue économique et financière* (The Economic and Financial Review), 38th year, No. 30, Paris, 28 July 1917.

The report on the year 1915-1916 presented by the administrative council of the *Crédit Foncier Égyptien* at the annual meeting held on the 7th of last February shows that in that year the signs of an improvement in the economic situation were accentuated and that this was principally due to the general rise in the prices of agricultural products.

The cotton harvest of the 1915 season was affected by the reduction of acreage. It produced only 4,775,000 cantars (1), although the average harvest of the last three years surpassed 7,000,000 cantars, but the average price rose to 19 $\frac{1}{4}$ talaris (2) so that the harvest brought in 21,790,000 Egyptian pounds (3). Sowing in 1916 was in no way restricted and the official estimates point to a harvest of 6,023,820 cantars. Complaints of attacks by worm have been general. But the giddy rise in the price of cotton, which passed in a few weeks from 5 to 10 Egyptian pounds, allowed excellent results to be attained with a mediocre harvest. The price of grain and sugar-cane also rose, so that trade got rid of its stocks, and old debts have begun to be lightened while the absence of new debts has led gradually to healthier conditions.

The happy influence of this state of affairs favourably affected the making of annual payments to the *Crédit Foncier Égyptien*, especially in the two last months of 1915-1916; and therefore more satisfactory receipts may be anticipated for 1916-1917.

On 31 October 1916 total arrears amounted to 2,966,842 Egyptian pounds, in addition to 121,416 Egyptian pounds from their amount at the end of 1914-1915. The amount falling due in the year was 2,652,210 Egyptian pounds. The report notes that this amount includes an amortization of more than 1,000,000 Egyptian pounds. Recoveries of the principal of the annuities amounted to 2,530,794 Egyptian pounds. Settlements in cash amounted to 2,418,940 Egyptian pounds, the highest figure reached for five years, while settlements by way of consolidation reached 110,909 Egyptian pounds, the lowest figure in the same period. The amount represent-

(1) 1 cantar = 99.043 lbs. (2) 1 talari = about 4s 11 $\frac{1}{4}$ d at par. (3) 1 Egyptian pound = abt. £ 1. 4s 8d at par.

ing forced sales, by the *Foncier Égyptien* or other creditors, of real estate mortgaged to the society was 778,228 Egyptian pounds, or more by 21 per cent. than the average for the last five years. The percentage of real estate awarded to the society was however 50 as against 81 in the previous year, and this indicates a certain recovery in the business in real estate.

The council intimates that from the beginning of the year the situation again became sufficiently normal to allow the society to resume making loans, but that the business in real estate has been pretty well limited to sales under legal necessity. The few voluntary sales have rarely necessitated an intervention in the form of new loans. The balance-sheet dated 31 October 1916 therefore shows total mortgage loans to be less by 1,543,322 Egyptian pounds than in the preceding year.

The following is a comparison of the two balance-sheets :

ASSETS :	31 October	
	1915 frances	1916 frances
Shareholders	100,000,000	100,000,000
<i>Mortgage Loans :</i>		
Long term	653,428,074	615,547,415
Short term	6,591,791	4,420,547
By sale of real estate	4,712,807	5,096,497
By opening credit	7,572,886	7,232,738
	672,305,558	632,297,197
Loans in realization	483,507	853,669
Contingent sale of real estate	11,537,482	15,242,331
Real estate acquired by expropriation	27,555,062	34,744,041
Agricultural stock and implements		120,656
Loans secured by pledges	2,567,352	2,551,352
Interest acquired but not due	40,964,510	40,495,606
<i>Annual payments due :</i>		
Previously to this year	26,451,275	33,677,818
During this year	47,312,212	43,233,202
Society's real estate	1,279,336	1,279,336
Bills and various securities	15,524,274	47,471,181
Accounts of banks and correspondents	20,660,783	20,128,584
Cash in hand	68,147	39,193
Various	2,722,009	2,464,678
Total Frances	969,431,507	974,598,844

LIABILITIES :	31 October	
	1915 frances	1916 frances
Capital in shares	200,000,000	200,000,000
Bonds in circulation	635,323,366	631,473,073
Repayable bonds, interest and dividends payable	18,851,918	16,847,761
Provision for amortizing bonds	18,370,669	19,506,835
<i>Reserves :</i>		
Reserve as by by-laws	7,735,804	7,679,109
Extraordinary reserve	25,165,860	25,165,860
Provision for eventual reduction of premium on bonds	14,890,903	14,890,903
Thrift account	6,250,014	6,472,176
Provision for amortization of domain . .	10,697,895	15,490,176
Provision for loss on annual payments in arrears	7,628,829	8,354,365
	72,369,305	78,052,589
Deferred payments on mortgage loans . .	581,373	492,989
Anticipated annual payments	447,090	1,058,776
Interest owed but not due	9,114,352	10,067,327
Various	4,694,953	5,886,456
Profits and losses	9,678,481	11,231,038
Total Frances	969,431,507	974,598,844

Mortgage loans have diminished by forty millions. During 1915-1916 the *Crédit Foncier Égyptien* made 150 loans amounting to 12,581,414 francs, bringing the total amount of loans made since the society was formed to 1,803,690,428 francs. Amortization of loans and anticipated and regular repayments reached the sum of 52,689,775 francs, which explains the difference we have noted. The other items in the balance-sheet call for no remark in addition to what has already been said.

GERMANY.

THE "LANDWIRTSCHAFTLICHER KREDITVEREIN" OF THE KINGDOM OF SAXONY IN 1916. — *Der deutsche Oekonomist*, 35th year, No. 1808, Berlin, 11 August 1917.

If, in the report of this "Agricultural Credit Union", the placing of its paper in 1916 be compared with the placing thereof in the previous year

a considerable development is observed. In 1915 the society placed bonds and letters of credit for 5,714,300 marks, in 1916 for 6,642,700 marks. Towards the end of the latter year these transactions were particularly numerous, and the bonds and letters of credit intended for sale were sometimes found to be exhausted. Those available on 31 December 1916 represented only 287,900 marks, as against 539,475 marks in 1915 and 907,175 marks in 1914. During 1916 the value of this paper in circulation increased by a round sum of a million marks, passing from 371,231,375 to 372,256,250 marks. This is due to the large new issues of bonds and letters of credit by the *Landwirtschaftliche Kreditverein*, which amounted during the year to more than five and a quarter millions. These bills are repayable when mature at their nominal value and generally bring considerable profits to their holders while current. Such of them as remain to be amortized are in great demand by the public, as is shown by the figures regarding the free commerce in bills. It has been possible thus to lend anew 7,855,405 marks. Repayments amounting to 1,960,032 marks being deducted, the sum of the loans constituting the society's credit was 439,564,904 marks at the end of 1915, and it rose before the end of 1916 to 445,460,278 marks. During 1916 the forced sale by auction of fourteen properties pledged to the *Landwirtschaftliche Kreditverein* was ordered and seven were actually sold. Two were put up for auction on the *Kreditverein's* demand in consequence of dues to be paid. The seven properties sold by auction have an area of 165.1530 hectares (1) corresponding to 4,631.36 taxable units. If the sums thus granted by the *Kreditverein* be compared, from the point of view of the mortgage, they are seen to be 35.79 of the legal costs and 52.64 per cent. of the amount obtained at the last auction. In 1916 as in 1915 the *Kreditverein* was obliged to acquire a property to cover the amount of its credit. The properties sold by an amicable agreement extend over 3,155.40 hectares and are burdened as forming 93,159 taxable units. Their value has been certainly determined by means of an estimate, in the case of eleven of them by taking 40 marks as the average for a unit liable to the land tax. Such value is 6,605,339 marks. The loans made by the *Kreditverein* amounted to 2,876,400 marks, a sum covered by mortgages for 3,133,216 marks. If the amount of the loans made by the *Kreditverein* be compared with the value of the properties, determined by the double method already indicated, from the point of view of mortgages, it is found to be 47.43 per cent. of such value.

Under dues the sum of 450,574 marks occurs in the balance-sheet. It comprises later recoveries, amounting however only to 4,499 marks and emanating largely from debtors under arms, and the dues falling due in the first quarter of 1917 which amounted to 446,075 marks. At the end of January 1917 the total sum of dues owed in 1916 was 19,447,067 marks. Out of the 19,207,031 marks of dues owed in 1915 only 54,226 marks or

(1) 1 hectare = 2.47 acres.

0.28 per cent. were in arrears at the end of January 1916, and this sum was reduced in the following year to 33,591 marks or 0.17 per cent. It may therefore be said that recoveries are made in good conditions. In 1916 net profits were represented by 505,793 marks as against 430,887 marks in the preceding year. Of this sum 30,000 marks were paid as in the previous year into the general reserve and 80,000 marks into other reserve funds, whereas in 1915 nothing was paid into reserves. As in 1915 there was in 1916 a payment of 50,000 marks to the fund for amortizing the properties and of a dividend of 4 per cent. on their capital shares to members. The remainder of the balance was carried over into the next year.

Part IV: Agricultural Economy in General

FRANCE.

THE TECHNICAL RE-EDUCATION IN ESTABLISHMENTS DEPEND- ING ON THE MINISTRY OF AGRICULTURE OF MEN MUTILATED IN THE WAR.

SOURCE:

CHANCERIN (Inspector of Agriculture): Study having this title and published in *La main-d'œuvre agricole*, 14th year, No. 217, Paris, 10 and 25 July 1917.

Since the outbreak of the war the Ministry of Agriculture has been ceaselessly busy over the fate of wounded and mutilated men from the country. It is indeed too clear that, apart from every other consideration, their future is bound up with the agricultural prosperity of France. As early as the beginning of 1915 the ministry was pushing forward the organization of agricultural re-education in its schools. The matter has not been without difficulties. The schools best fitted for re-education of this kind were almost all being used as hospitals; and staffs were lacking since managers and teachers had been mobilized.

However at the end of 1915 the Ministry of Agriculture had eight schools of re-education; five others were ready to start work at the beginning of 1916; and on 31 December eighteen schools of technical re-education were active. In July 1917 twenty-one of them were in full swing and six more were to be opened in August.

The re-education did not at first yield the results expected for the recruiting of pupils was difficult. Many of the mutilated agriculturists — the small proprietors, leaseholders and *métayers* — had only one preoccupation: they wished to go home as soon as they were free. These men could not be made to understand the advantages of re-education.

There remained the agricultural labourers, and they indeed form almost exclusively the pupils of these special schools. They consent to come to them because they hope the teaching they receive will enable them to find situations as managers or foremen. Sometimes their hope to better themselves leads them further: they pass into trade and industry. Is it right thus to encourage a new exodus into the towns? This new danger must be eliminated or at least attenuated.

For this end it is first necessary that the recruiting of pupils for the schools of agricultural re-education should give better results. It should be considered whether it be not a mistake to wait for the discharge of a mutilated man before admitting him to a school of re-education, and whether — what is worse — this mistake do not tend to his own disadvantage.

The experience of these State schools as of the private schools has shown clearly and precisely at what time technical re-education should begin. It should not be left until a man's discharge, or the number of the re-educated may be infinitesimal and a failure may result. It should begin before discharge, while hospital treatment is still being received, and should accompany re-education in physical functions. Recruiting should take place among mutilated and wounded men who will be discharged. The methods of beginning re-education at the earlier and at the later stage have been tried, notably in the district school of Ondes near Auch (Gers) ; and there is no longer any doubt that the earlier start leads to excellent results from every point of view. Wounded men who are going to be discharged are delighted to be taught while they are undergoing treatment. Several of them have even confessed that they came to these schools with the settled purpose of settling later, when they were free, in a town, and that their taste for agriculture has been revived. Very often a discharged mutilated man does not come to the schools of re-education and leaves the land because he imagines that he will never be able for the varied work of fields but is good only for a simple and monotonous task in a factory, or even that he is no longer adapted to any physical labour. Mutilated men who have reached this point of doubting completely their strength or skill may be shown that it is possible for a man who voluntarily abstains from the use of one limb to execute the labour of agriculture.

At the end of a week the men have regained confidence, and a month later they are almost normal workers. Little by little they are convinced that they must not look upon themselves as the inferiors of hale men, of whom they become at least the equals in right of the knowledge they acquire at the school of re-education.

Moreover not only has experience shown that technical re-education should take place as soon as the condition of the wounded and mutilated men allows of it, but the doctors have further discovered that to secure rapid cures and success in the reteaching of muscular functions there are no better exercises than the infinite varieties of movements and attitudes to which agriculture gives rise.

The Health Service therefore gave back to the department of agriculture the national schools of Montpellier and Rennes, in order that sections for re-education might be installed in them side by side with medical centres. The Ministry of Agriculture completely fitted up the school at Grignon for the reception of more than sixty wounded men. This combination of re-education and hospital treatment is realized wherever possible. The excellent results which it already gives allow the hope that agricultural re-education will keep on the land almost all the wounded and mutilated countrymen who might think of leaving it.

§ I. WHAT TECHNICAL RE-EDUCATION SHOULD BE.

There are already examples of efficient technical re-education: the small hospital of Martillac has already supplied about 30,000 working days to local agriculture, to the great advantage of the district and of the wounded men whose cure has thus been invariably accelerated, facilitated and rendered less costly. The maximum amount of energy, which would otherwise be lost irrevocably to agriculture, is thus recuperated within the shortest possible time.

We must not however close our eyes to the fact that the men's injuries always entail a diminution of purely physical force, however small may be the loss. The endeavour is to compensate for this diminution by an intellectual gain, in that the wounded and mutilated men are enabled to derive in the future more from their labour, even in many cases to do better than before the war. To reach such a result practice and theory must be skilfully mingled in the process of re-education. If the value of a mutilated man is to be so increased that there will be as much demand for him as for an ordinary workman, it is absolutely indispensable that the wherefore and the how of agricultural operations be carefully explained to him. Experience has made it clear that a mutilated man cannot give himself up continuously to what is called general agriculture.

"A mutilated man", says M. Duchein, director of the district school of agriculture of Ondes near Toulouse, "is really in place only at the head of a farm or a yard, as a farmer, *métayer*, lessee, manager or foreman. As such he can, being one of several workers on a farm, choose work suited to his aptitudes. Most of the poor men among the mutilated, and it is only they who need to have work found for them, will certainly have, when they have been re-educated, the technical qualifications of managers or tenant farmers". The men here contemplated have encountered the thousand difficulties of practical agriculture and have the habit of observation, and therefore it will be possible to give them in a comparatively short time agricultural teaching enabling them to raise themselves. The work already accomplished in the schools allows this confidence to be felt. But obviously all cannot find situations as managers. They will be workmen who will be appreciated and sufficiently sought after by farmers, but the possibility that they will be only casually and occasionally employed must be avoided. Thought has already been given to this point. The Ministry of Agriculture wishes that all mutilated agricultural labourers who have been re-educated in the schools of agriculture may easily become owners or lessees of land. Holdings to be let and small rural holdings which can be acquired cheaply are numerous in France. All which those concerned need, in order to establish themselves on them, is a little money. Agricultural credit is prepared to lend them this money. This is a matter of much importance to the mutilated men and to the recruiting for the schools of re-education, and it gives direction to the teaching in these schools.

The service of agricultural credit which depends on the Ministry of Agriculture is active to-day in all the departments of France and renders valuable support to young agriculturists to whom it offers credit of two sorts — long and short or medium-term credit.

We should recall that the individual long-term credit, instituted by the law of 19 March 1910 (1), includes long-term loans afforded by the district funds for agricultural credit and intended to facilitate the acquisition, disposition, conversion and reconstitution of small farms. These loans may be of as much as 8,000 francs and are repayable within a maximum period of fifteen years by annual instalment computed at the average rate of interest at 2 per cent. They should be secured by a mortgage or a life insurance contract.

The short-term credit regulated by the law of 31 March 1899 includes advances on harvests and loans to agriculturists, at very profitable rates, of the funds they need to buy manures, seeds, ploughs and animals and pay the wages of agricultural labourers and rent.

These loans are granted in return for the deposit of negotiable bills, generally guaranteed by a deposit or a warrant. Their term varies, according to the transaction which they enable, from 3 months to a year. Thanks to the mutual funds of agricultural credit, small agriculturists can therefore obtain the money they need on terms equivalent to those which large proprietors enjoy.

Moreover the district funds of mutual agricultural credit have lately been authorized to afford a new form of credit, called medium-term credit. This is to say that, to enable the acquisition of live stock or agricultural material, they may grant loans for a maximum term of five years and of a maximum amount of 5,000 francs under certain special guarantees. These loans are granted at the same rates as short term loans.

In order to benefit by any one of these forms of credit an agriculturist must be a member of :

(1) an agricultural syndicate or an agricultural mutual insurance society of the district ;

(2) a local fund of mutual agricultural credit. One of these societies may be joined when application is made for the loan, a member's share being in such case deducted from the sum lent.

The road thus opened up to discharged agriculturists is plain. When they have passed through a centre of agricultural re-education they will have serious guarantees of their technical ability which will render much easier to them the access to funds of agricultural credit, the more so because government is now considering how discharged men wishing to devote themselves to agriculture may benefit by special conditions which will yet further facilitate their acquisition of small rural holdings.

(1) See our issues for December 1910 and April 1911, *Bulletin Mensuel des Institutions Économiques et Sociales*, 1st year, No. 3, December 1910, p. 276 and 2nd year, No. 4, p. 197.

§ 2. THE ORGANIZATION OF THE SCHOOLS.

On principle the Ministry of Agriculture has made all possible use of schools of agriculture existing before the war, and has formed in each of them, side by side with the provision for general instruction, several specializing divisions, in order that the mutilated men may specialize at the same time in several branches of agriculture affording interesting openings. At present the following twenty-one schools of re-education are at work :

1. National School of Agriculture of Grignon.
2. National School of Horticulture of Versailles.
3. National Dairy School of Mamirolle (Doubs).
4. National Dairy School of Poligny (Jura).
5. Dairy Trade School of Surgères (Charente-Inférieure).
6. National Basketmaking School of Fayl-Billot (Haute-Marne).
7. Shepherds' School of Rambouillet (Seine et-Oise).
8. Special School for Mechanics of Noisy-le-Grand (Seine-et-Oise).
9. District School of Agriculture of Ondes (Haute-Garonne).
10. Practical School of Agriculture and Dairy Work of Aurillac (Cantal).
11. Practical School of Agriculture of la Brosse, near Auxerre (Yonne).
12. Practical School of Agriculture of Pétré (Vendée).
13. Practical School of Agriculture of Tomblaine, near Nancy (Meurthe-et-Moselle).
14. Practical School of Agriculture of Grand-Jouan (Loire-Inférieure).
15. Practical School of Agriculture of Oisellerie (Charente).
16. Practical School of Agriculture of Ecully (Rhône).
17. Practical School of Cooperage and Distilling of Saintes (Charente-Inférieure).
18. Practical School of Aviculture of Gambais (Seine et-Oise).
19. Departmental School of Bourges.
20. Departmental School of Auch-Beaulieu (Gers).
21. School "La Maison du Soldat", 97 rue Jenner, Paris.

On 1 April these schools had re-educated 830 mutilated or wounded men while 381 such men were then receiving re-education.

It is announced that the following schools will soon be at work :

1. National School of Agriculture of Montpellier.
2. National School of Agriculture of Rennes.
3. School of Agriculture of Contamine-sur-Arve (Haute-Savoie).
4. School of Agriculture of Bordeaux-Blanquefort.
5. School of Agriculture of Besançon.
6. Departmental School of Cellard (Loire).

There will thus come to be twenty-seven schools of technical re-education in agriculture.

§ 3. RESULTS OBTAINED.

We will now examine the present state of these schools, the results they have obtained, the observations made in them, and the reflections which the practice of technical education has suggested to the teachers in them.

National School of Agriculture at Grignon. — There is a division for the training of rural mechanics and another for training shepherds. Eighteen mechanics of tractors or drivers of machines have already been placed at the disposal of farmers. Recruiting for the shepherds' division is difficult. The school could not render any real services by re-education until the Service of Health installed in it a medical hospital and the wounded men who were receiving treatment could be re-educated. Seventy-eight mutilated or wounded men have been re-educated and fifty-six wounded or discharged men are now being re-educated. The school could easily accommodate 150 of the mutilated.

National School of Horticulture of Versailles. — The school cannot board pupils and this is a serious obstacle to recruiting. Only four mutilated men have been re-educated.

Dairy Schools of Mamirolle, Poligny, Surgères and Aurillac. — These schools have re-educated thirty-one mutilated men. Recruiting is difficult. The Poligny school can receive only slightly mutilated men for the work necessary to the manufacture of Gruyère cheese is heavy.

Most of the mutilated men re-educated in the Surgères school become inspectors or testers of milk and can earn from 120 to 150 francs a month. The pay of buttermakers and firemen begins at from 120 to 130 francs a month. The Central Association of the Co-operative Dairies of the Charentes and Poitou has facilitated the stay of the men at this school by allowing 45 francs a month at least to such of them as belong to the three departments of Charente-Inférieure, the Deux-Sèvres and the Vendée.

The Chantal is so far from the large medical centres and the hospitals that the Aurillac school yields no result.

National School of Basketmaking of Favt-Billot. — The school, which depends at once on the Ministries of Agriculture and of Commerce, recruits normally. Sixty-two mutilated men have been re-educated in it, eight of them being blind. All have easily found situations on leaving. Their average earnings are from 5 to 6 francs a day; a few receive 7 francs a day, or 150 francs a month with board and lodging. It follows on the director's personal observations that re-education should begin immediately after a cure, before the time necessary for the formalities of discharge has elapsed. Apprenticing is comparatively easily accomplished, even in the case of the blind. It is important not to be afraid of spending much time at the outset, for once the principles of basketmaking have been learnt time will eventually be saved. Thus after eight or ten months of apprenticeship a blind man can manage to make one or two objects which have a market and allow him to earn his living. A blind man's work should not differ from that of a seeing man and therefore his wage should approximate to that of the latter.

As much as possible the school should seek to send the men back to their homes. In any case it should find situations for the re-educated men, insure that they have work by coming to an understanding with manufacturers, and even give them guiding after they have been re-educated.

Shepherd's School annexed to the National Shepherding Industry at Rambouillet and the Training of Shepherds in the Schools of Agriculture. — This school was formed in accordance with a resolution of 3 April 1916 and received its first pupils on the following 30th of August. A committee of benevolence, got together by M. G. Hanotaux, gives 100 francs a month for the maintenance of each mutilated man. Good shepherds are highly important: they would help to reconstruct the country's flocks, without which the problem of wool will be very difficult to solve, as indeed it was before the war. The Ministry of Agriculture has therefore annexed shepherds' schools to several schools of agriculture. At Rambouillet two shepherds have been re-educated and six are being re-educated. The school at Rambouillet is also concerned with agriculture in general, gardening, basket-making, and, exceptionally, the management of engines. A gardener, the driver of an engine and a basketmaker have been re-educated, and three basketmakers and one gardener are now being re-educated in the school.

School of Driver-mechanics at Noisy-le-Grand. — Before the war the development of mechanical cultivation, as a certain palliative to the unceasing diminution of rural labour, was already a preoccupation of the Administration of Agriculture. There had been competitions in mechanical cultivation and schemes for schools for rural mechanics had been prepared. The war has made the development of mechanical agriculture a yet more urgent matter: after the war every agriculturist should be in some sort a mechanic. The Ministry of Agriculture has therefore regarded as an imperative duty a contribution to the staff necessary to the working and upkeep of tractors and of agricultural machinery generally. It has been possible to recruit this staff among mutilated agriculturists, the more so because the wages of such employment are equal to those given in industry. The following are examples of wages earned: manager of a depot of tractors, 15 francs a day; assistant manager, 12 francs; chief mechanic, 13 to 15 francs; chief assistant mechanic, 8 to 10 francs; chief smith, 8 to 12 francs; chief assistant smith, 6 to 10 francs; driver of a tractor, 3.50 francs plus 1.50 francs a hectare (1) — since two hectares are ploughed in a day this amounts to 6.50 francs a day — together with board and lodging.

An enquiry into the service of mechanical agriculture revealed that it is possible to re-educate as drivers of tractors men who have lost one leg, men who have lost one arm if the shoulder and elbow joints remain good, and men who have a stiffened elbow joint with a more or less normal shoulder joint. Men with a mended shoulder joint will never be able to drive well and will not be able to put out the necessary strength to start a machine. Men who have lost a left arm and have a stiff left shoulder have difficulty

(1) 1 hectare = 2.47 acres.

in manipulating the left-hand levers, especially if these are at a little distance. A man with one sound leg can however manage the foot-levers.

We have already seen that a division for rural mechanics has been annexed to the Grignon school. The same is true of the schools at Montpellier, Rennes, Ondes, Tomblaine, Oisellerie, Auch-Beaulieu and Brosse.

The school at Noisy-le-Grand was founded on a farm of 180 hectares, which was together with a sum of 100,000 francs, placed at the disposal of the Ministry of Agriculture by a generous donor, Mme. Gomel-Pujos. The school has been at work since 17 February 1917 and has already received 137 pupils.

Ondes District School of Agriculture. — The division for re-education in this school was formed on 4 December 1915 and may be considered to be the finest example of what the collaboration of a school of agriculture and the Service of Health can produce. The division disposes of a hundred beds. From the time of its foundation it has been maintained in an almost complete state. The pupils are admitted in series, every four months. The practical teaching includes farm-work, gardening, smith's work and woodwork, forestry and basketmaking. The wounded men are divided into six groups, and these in turn, for two days at a time, work: (1) on the farm — in the stables and under cover; (2) on the farm out of doors; (3) in the garden; (4) in the smithy; (5) in the carpenter's shop; (6) at basketmaking and in the hospital. Recruiting has always been ensured by the chief doctors of the centre of neurology of the 17th region, Drs. Cestan and Decomps. Only some ten invalids have been placed, and they became managers earning from 100 to 120 francs a month with allowances in kind. The difficulties are great both of recruiting the pupils and of giving them the teaching which should complete their physical re-education. Half the wounded are farmers and are obsessed by a wish to go back to their homes. The other half, agricultural labourers, can be a little more easily influenced by a hope of bettering themselves. Almost all of them are very little educated and at first they are all suspicious. But after a fortnight such as have been convinced of the advantages of re-education are finally won. Their efforts and the progress they make are soon surprising. In four months' time these invalids have acquired an important sum of technical knowledge. They have, in fact, sufficient knowledge to till the soil intelligently. But in order that the initial difficulties may be overcome the men must be approached patiently and every effort must be made to give them confidence first in the technical teaching and then in themselves. It is possible to do this. At first a mutilated man feels that it will be difficult for him to play an active part in life; his future looks dark to him; he thinks he is condemned to an existence of unhappiness. Gradually he discovers the forces latent in his brain, and his hopes are reborn and amplified. When he leaves the school he is longing to prove his worth, to begin his task courageously.

The school of Ondes has re-educated 253 discharged wounded or invalid men, and now contains 133 pupils.

The School of Grand-Jouan has re-educated thirty-two mutilated men. The general instruction includes the study of the most important points

of agriculture and horticulture. The school also trains basketmakers, shepherds and rural mechanics. According to the director, M. Montaux, recruiting for it is accomplished fairly easily by advertisements in the newspapers; and the freely given support of the local press has further made it possible to find situations for all those mutilated men whose re-education has been finished. The system even provides offers of employment for men whose re-education is still in course. The wages earned by the men whom the director has thus placed vary from 1200 to 2000 francs a year, and this is for this district a high rate. It is noteworthy that all these mutilated men have better situations than they had before the war. Most of them are gardeners, a few foremen on farms or managers.

The School of Cooperage and Distilling at Saintes has re-educated fourteen mutilated men and is now re-educating three.

The School of Agriculture at Gambais has received twelve mutilated men and now contains three such.

The Departmental School of Auch-Beaulieu has re-educated ninety-six mutilated or wounded men and is now re-educating forty-five. Here, as in the school at Ondes, the management of the Service of Health has been of great assistance both to recruiting and to working. The chief divisions which have been organized are those of general agriculture, gardening, poultry-keeping, cow-keeping, grafting and viticulture, woodwork and smith's work, the division for the mending of agricultural implements and that for the driving of tractors. It seems also to be useful to revive in the field-workers the elementary knowledge of writing, French and arithmetic which they received in the primary schools and have most frequently forgotten, in order that they may keep accounts connected with their work, if necessary the accounts of a property. The manner in which the pupils apply themselves to the elementary lessons they receive in the various branches of agriculture is the surest guarantee that these lessons are necessary. Manual work occupies them for nearly five hours a day and is the real basis of their re-education. The practical work is of two kinds: it aims at re-educating the physical functions of a mutilated man and at his readaptation to agriculture. He needs progressive exercises to give suppleness to his stiff limbs or to give him skill to use them or to use artificial limbs. A series of exercises have this aim. The readaptation of a man to agriculture is accomplished at Beaulieu in the school's annexes by the teaching of various special branches of agriculture chosen in accordance with his physical aptitudes or the knowledge he possesses.

The same difficulties have had to be overcome as in the other schools, and here again the help of the Service of Health has been useful, thanks to the very special interest which M. Prost Maréchal, director of the Service of Health in the 17th region, has taken in the school since the end of December 1916. This service filled thirty vacant places in the school, which is maintained as a fully active re-educational centre having from forty to fifty pupils. About a hundred wounded men must have passed through Beaulieu and three fourths of them have returned to agriculture.

The *Departmental School of Bourges* has re-educated nineteen mutilated or wounded men and is now re-educating twelve such.

The "*Maison du Soldat*" (Soldier's House) in the 13th *arrondissement* in Paris has re-educated sixty-four mutilated men and is now re-educating sixteen such.

§ 4. TEACHING METHODS IN THE SCHOOLS OF AGRICULTURAL RE-EDUCATION.

Most of the mutilated men who come to the schools of agricultural re-education have received only elementary primary instruction. To reach the best results as practically as possible the master gives intuitive teaching by means of object lessons. He always makes an appeal to the pupil's judgment and spontaneity; he proceeds from the known to the unknown, from the concrete to the abstract, from the easy to the difficult; he provokes thought in the pupil; he helps him with a series of easily answered questions; he places him on the right path, leaving him the pleasure and profit of individual initiative. A lesson is almost always a dialogue between the pupils and the teacher who interrupts his remarks as often as circumstances seem to him to make questions necessary. A lesson is merely an explanation of practice. All the teaching is practical; but no agricultural operation is accomplished unless the pupil have understood the why and the how thereof.

§ 5. MEASURES NECESSARY TO THE SUCCESS OF AGRICULTURAL RE-EDUCATION.

One point cannot be over-emphasized. The true way to succeed is to recruit, as soon as their condition permits, only mutilated and wounded men who will be discharged, and to conduct together the re-education in physical functions and in technique. For this it is necessary to connect the schools of agriculture with the medical centres. Investigations have shown that it is unwise to re-educate in one establishment discharged invalids and mutilated or wounded men who will be discharged but are still subject to military discipline.

A knowledge of the advantages of re-education should be disseminated, for the men concerned are always too suspicious of it until they have experienced its benefits. It is intended to do propaganda work by means of an organization which will be represented in all the hospitals and will be called the *League for the Return to the Land*. Lectures and cinematographic films will be very useful in teaching through hearing and sight how much is already being accomplished and how well the efforts for re-education have been founded. A special pamphlet has been prepared for the wounded in the

hospitals, and this shows: (*a*) What agriculture will be after the war (conversion of manual into the less laborious mechanical labour — the agriculturist become a mechanic); (*b*) How industry compares with agriculture from the point of view of health; (*c*) What an educated agriculturist can earn and what agricultural mechanics are now earning; (*d*) How a wounded or mutilated man can receive free teaching; (*e*) How an agricultural labourer can easily become a landowner or a tenant farmer. It would be well also to set up beside each school of re-education and in constant connection with its director a special organization for the placing of re-educated mutilated agriculturists.

GREAT BRITAIN AND IRELAND.

THE CORN PRODUCTION ACT, 1917.

OFFICIAL SOURCE :

THE JOURNAL OF THE BOARD OF AGRICULTURE, Vol. XXIV. No. 6, London, September 1917.
MEMORANDUM EXPLAINING THE PRINCIPAL PROVISIONS OF THE CORN PRODUCTION ACT, 1917, AS REGARDS AGRICULTURAL WAGES IN ENGLAND AND WALES. — The Board of Agriculture and Fisheries, September 1917.

The Corn Production Act, passed on the 21st of last August, affects two great sections of the British agricultural population, the wage-earning labourers and the tenant farmers. To the former a minimum wage is secured ; and the latter are in the first place guaranteed minimum prices for their wheat and oats for the six years from 1917 to 1922, and in the second place protected against a raising of their rents which might deflect to their landlords the profit arising from such minimum prices. The protection given by this Act to agriculture and its restriction of the freedom of agricultural contracts represent a principle new in British legislation.

We propose in this article to deal only with Parts II and III of the Act, which concern, respectively, minimum wages and the limitation of rents, and to leave on one side Part I which regulates the minimum prices of wheat and oats. We purpose further to deal only with the Act as it affects England and Wales, omitting the particular provisions for Scotland and Ireland.

§ I. THE FIXING OF AGRICULTURAL WAGES IN ENGLAND AND WALES.

a) *Agricultural Wages Board.* — The Act provides for the establishment, by the Board of Agriculture and Fisheries, of an Agricultural Wages Board for England and Wales, of which the main function will be to fix minimum rates of wages for workmen employed on agriculture. The term workmen includes women, boys and girls, and the term agriculture includes not only farm work but also work on osier land, and in woodlands, orchards, market gardens and nursery grounds.

The Wages Board will consist of three classes of persons, namely : a) " appointed members ", otherwise persons directly appointed by the Board of Agriculture and Fisheries, who need not necessarily be engaged in agriculture but who will be expected to judge impartially between employers'

and workers' interests; b) members representing employers; c) members representing workers.

Women as well as men will be eligible as members of the Wages Board.

The members representing employers and those representing workers must be equal in number; and the appointed members must not exceed a quarter of the total number of members of the Wages Board. For the rest, the numbers of appointed and of representative members and the methods of electing both classes of the latter will be determined by regulations of the Board of Agriculture and Fisheries.

The chairman and secretary of the Wages Board will be appointed by the Board of Agriculture and Fisheries.

b) *Minimum Rates of Wages.* — It will be the duty of the Wages Board to fix minimum rates of wages for time-work for all classes of workers, and it may, if it think it necessary or expedient, also fix minimum rates of wages for piece-work. These rates, whether for time-work or for piece work, may be fixed so as to apply universally to agricultural workers, or may be fixed differently for different districts, different classes of workers, or different kinds and conditions of employment.

In fixing them the Wages Board is required by the Act to secure, as far as is possible, that an able-bodied man receive such wages as, in its opinion, promote his efficiency and enable him to maintain himself and his family in accordance with a standard of comfort reasonably consonant with the nature of his occupation. Where time-work is concerned the Act lays down specifically that the minimum rates must secure for an able-bodied man wages equivalent, in the opinion of the Wages Board, to at least 25s. a week. The term "able-bodied man" does not apply to women, boys or girls, but only to any male workman who is not incapable, by reason of age, mental or other infirmity or physical injury, of performing the work of a normally efficient workman.

In computing the wages the value of such customary allowances as are not prohibited by law may be taken into account, in so far as the Wages Board may authorize and on a basis of value to be fixed by the Wages Board. Deductions from cash wages in respect of an allowance of intoxicating drink are however illegal under the Truck Acts.

Any minimum rates fixed under the Act will be without prejudice to the payment, under any agreement entered into or custom existing before the passing of the Act, of rates higher than the minimum rates.

c) *Procedure to Fix Minimum Rates.* — Before fixing any minimum rate of wages the Wages Board must give notice of the rate which it proposes to fix, and must consider any objections to it which may be lodged within one month. When a rate has been fixed notice thereof must be given by the Wages Board for the information of the employers and workers affected.

The Wages Board may, if it think expedient, cancel or vary, after due notice, any minimum rate fixed by it. It must reconsider any rate if directed to do so by the Board of Agriculture and Fisheries.

d) *Procedure to Enforce Minimum Rates.* — When a minimum rate of wages has been fixed any agreement for the payment of wages at less than

such rate is void. Payment of wages at less than such rate renders the employer liable to a fine of not more than £20 and also to a fine of not more than £1 for each day on which the offence is continued after conviction therefor, unless he prove that he did not know and could not with reasonable diligence have ascertained that he was paying less than the fixed minimum rate.

When the Wages Board is satisfied that a worker on time-work is affected by a mental or other infirmity or a physical injury, rendering him incapable of earning the minimum time-rate normally applicable in his case, it may grant him a permit of exemption. The employer is not liable to penalty for paying a worker having such a permit wages at less than the minimum rate, so long as he comply with any conditions prescribed by the Wages Board when the permit is granted.

Where legal proceedings are taken against an employer for paying wages at less than the minimum rate the court may, whether or not it convict him, require him to pay to the worker concerned any arrears of wages which it may hold to be due.

Any worker may complain, or may authorize another person to complain, to the Wages Board that he is being paid wages at less than the fixed minimum rate, and the Wages Board may, if it think fit, take steps on his behalf for the recovery of his due arrears of wages or the prosecution of his employer.

Moreover a worker may take proceedings on his own behalf for the recovery as a civil debt of any arrears of wages which may be due to him in respect of his payment at less than the minimum rate.

When a worker is working by the piece on work for which a minimum time-rate but not a minimum piece-rate has been fixed by the Wages Board, he may complain to this board, or may authorize another to do so, that he is receiving wages disproportionately low as compared with the wages payable at the fixed minimum time-rate. The Wages Board may then direct the employer to pay the difference between the effective amounts of wages at the two rates, and the worker may recover from the employer, summarily as a civil debt, any sum which the Wages Board so direct to be paid.

Officers may be appointed by the Board of Agriculture and Fisheries to investigate complaints and otherwise secure the proper observance of the provisions of the Act relating to minimum rates of wages. They will have the power to require the production of wages sheets and other relevant information. Persons refusing, at their demand, to produce such documents and information, or knowingly producing false documents and information, will be liable, on conviction, to a fine not exceeding £20, or to imprisonment for not more than three months with or without hard labour. The officers have power to take legal proceedings in pursuance of directions of the Board of Agriculture and Fisheries for the enforcement of the Act.

e) *District Wages Committee.* — The Wages Board may establish Wages Committees to act for such areas as they may determine. The Board of Agriculture and Fisheries may require them to do so.

There will be equal representation on a District Committee of local employers and local workers, and it will include also at least one member of the Wages Board or another nominee of the Board of Agriculture and Fisheries. Its composition will be further settled by regulations of the latter board.

It will be the duty of a District Wages Committee to recommend to the Wages Board minimum rates of wages applicable to its own district. Only the Wages Board itself can fix, vary or cancel minimum rates of wages; but no minimum rate fixed for any area for which a District Wages Committee has been established can have effect or can be varied or cancelled except at the recommendation of this committee, unless it has had an opportunity of reporting thereon to the Wages Board.

The Wages Board may refer any matter to a District Committee, which will report and make recommendations thereon, and may delegate to a District Committee any of its powers and duties except the power and duty to fix minimum rates of wages. It may also authorize a District Committee to delegate any such powers, including that to issue permits of exemption to workmen who are not able bodied, to a sub-committee.

f) *Expenses and Remuneration.* — Expenses incurred with the consent of the Board of Agriculture and Fisheries by members of the Wages Board or of a District Committee, and sums paid to them with such consent to compensate for loss of time, will be paid out of public funds.

g) *Provisions of the Act already in Force.* — Pending the establishment of the Wages Board and District Committees, an able-bodied man employed on time-work, but no worker of any other class, who since 21 August 1917 has received wages — including allowances — which are in the opinion of the court less than equivalent for an ordinary day's work to the rate of 25s. a week, is entitled to recover the difference between such rate and that at which he is being paid from his employer as a civil debt, at any time within three months after the minimum has been fixed. The value of allowances in the cases will, if disputed, be determined by the court.

§ 2. THE RESTRICTION ON THE RAISING OF AGRICULTURAL RENTS.

a) *The Scope of the Restriction.* — Part III of the Act prescribes that when, after 21 August 1917, a contract of tenancy is made or varied, the highest permissible rent is that which the landlord could have obtained if the provisions as to minimum prices of wheat and oats, contained in Part I of the Act, had not been in force.

The purpose of the restriction is thus to reserve to the farmer, to the exclusion of the landlord, the profit derived from the minimum prices.

This part of the Act is said to apply to "any parcel of land which is wholly agricultural or wholly pastoral, or in part agricultural and as to the residue pastoral, or in whole or in part cultivated as a market-garden, and which is not let to the tenant during his continuance in any office, appoint-

ment or employment held under the landlord". Since however the restriction on the raising of rents is governed by the provision as to the minimum prices of wheat and oats, in effect this part of the Act concerns only arable land and land which will become arable.

The Act does not make it illegal for a landlord to obtain the best rent he can for his land, provided the effect of the guaranteed prices is left out of account. It does not affect the existing law as to the determination of leases, whether at their expiry, by notice to quit, or otherwise.

(b) *The Method of Enforcing the Restriction.* — If a tenant have reason to think that the rent he is asked to pay is higher than it would have been if the minimum prices for wheat and oats had not been guaranteed, and if he cannot arrange that it be reduced to the sum which would have been its amount without such guarantee, he may require the matter to be referred to a single arbitrator under and in accordance with the second schedule of the Agricultural Holdings Act, 1908. He must however first serve on his landlord, either personally or by registered post, within one year of the time at which the old contract is varied or the new tenancy begins, a written notice requiring the rent to be referred to arbitration.

A tenant who has agreed to a new rent does not lose his right thus to refer it to arbitration.

While the arbitration or the preliminary proceedings are in course the tenant must pay the rent stipulated in the contract of tenancy, and may not withhold any part thereof as being in excess of the rent permitted by the Act. If however the arbitrator eventually determine that the stipulated rent is too great, the tenant may recover whatever he has paid, since the old contract was varied or the new tenancy began, in excess of the rent determined by the arbitrator to be legal. He may recover such amount by deducting it from the rent he afterwards pays or otherwise, and he will in future pay only the determined rent.

The costs of the arbitration and award and incidental thereto are in the discretion of the arbitrator, who may direct to and by whom and in what manner they or any part of them are paid. In awarding costs he must take into account the reasonableness or unreasonableness of the claim of either party, in respect of amount or otherwise.

The arbitrator is appointed by agreement between the disputing parties, or failing this by the Board of Agriculture and Fisheries.

Nothing in the Act prevents a landlord and tenant from agreeing to a rent subject to its reference to arbitration under the terms of the Act.

A tenant who gives up a holding, rather than agree to pay a rent demanded as a condition of the renewal of his tenancy, cannot appeal to arbitration under the Act; and has no right to resume occupation of the holding even if it be decided subsequently, in proceedings instituted by his successor, that the rent demanded was in excess of that allowed by the Act.

HUNGARY.

INTERIOR COLONIZATION AND THE FUTURE OF SMALL PROPERTY.

SOURCES :

CZETTLER (Dr. V. v. Jenő) DIE INNERE KOLONISATION IN UNGARN, in *Archiv für innere Kolonisation*, Parts 10 and 11, Berlin, July and August 1917.

GLOSSEN ZUM UNGARISCHEN KOLONISATIONSGESETZENTWURF, *ibid* :

The form and structure of rural property in Hungary are a consequence of the historical vicissitudes through which this country has passed in the last century and which have governed the formation of large landed property. In these must also be sought the origin of the small rural towns which are here so characteristic, towns of which 40 or 80 per cent. of the population are agricultural labourers, generally owners of a house and a small garden. These labourers form the mass of the peasants who emigrate temporarily, and are employed more or less throughout the country on all kinds of work. They are however much attached to their native soil to which they return as soon as the work for which they have been engaged has ended.

When, on the whole somewhat late, capitalism made its conquering entry into Hungary, some of the wandering labourers bought land and many of them became small proprietors. The redivision of lands, the division of common pasture-lands and other collective property, and above all the sale of properties of the Domain which, for financial reasons, took place between 1870 and 1880, had an important effect in this direction. But these events entailed an entire absence of regularity in the method of taking possession of lands. When the finances of the Hungarian State were reduced to order and the conditions of the market improved, the position of landowners also became better. Consequently a smaller extent of land came into the market every year, and the opportunities for the rural populace, living apart in small half-rural and half-urban groups, to buy land, diminished proportionately. It was then that the first agrarian social movements began.

In order to relieve these over-populated groups of their excess of labour and better to realize the value of large landed property, which hitherto had been insufficiently cultivated owing to the lack of labour and capital, the government decided on the very definite land policy of methodically promoting interior colonization on the basis of a division of large estates suited to this use.

In this way and on these principles the first colonization law was framed. It left colonization strictly limited for it regards only State enterprises

of colonization and even renders colonization by individuals almost impossible. This law placed six million crowns (1) at the disposal of the Ministry of Agriculture. The interest of this sum was to be used for affording loans and other financial help to agriculturists cultivating lands of the Domain. Clearly since available resources were so slight, colonization on a large scale could not be contemplated. Sixteen colonies which were formed comprise nearly 1600 positions for farmers and 200 more for agricultural labourers. The average area of each farm is 40 arpents (2) and the purchase price varied from 3,000 to 16,000 crowns. The maximum concession was three fourths of this value and the term of redemption fifty years, interest being at the rate of 4 per cent.

Such being the conditions, the whole country felt the effect of the inadequacy and lack of measures which could provide an impulse where so important a matter was concerned. Dáranyj, Minister of Agriculture and president of the Federation of Hungarian Agriculturists, took note of aspirations which existed and embodied them in two proposed laws, respectively dated in 1903 and 1909, as to colonization and the regularization of the parcelling of land. But neither of his schemes became law. That of 1909 was however most useful for it treats the whole problem of a land policy fundamentally and integrally. It deals not only with colonization by the State and individuals but also with the parcelling of land, with the *Rentengut* (2) or property subject to the payment of a yearly rent, with colonization based on leases and with farmers' co-operative associations. It contemplates a colonization fund of 120,000,000 crowns. It would have been applied, for special ends, on all State property without reservation. Had it become law when it was introduced it would have met with a great success, for the purchasing power of money was then far greater than it is now.

This scheme having fallen to the ground the State founded a federation of Hungarian institutions of land credit, the *Allruistenbank*, in order not completely to lose its directive influence over rural affairs. Although this institution disposes of somewhat limited resources they assure to the State an influence over the parcelling of land, the sales of property and the terms on which rural credit is afforded.

It is certain however that Hungarian rural policy has not brought about that the State or the middle class disposes of sufficient financial resources or capital to be able to cope with the problem of colonization on a large scale; and the parcelling of land by business men who consider only their own profit is almost always fatal to the economic future of the new small proprietors. Thus among those in favour of interior colonization the idea arose of seeking for new resources and opening up new roads to the desired goal. If this were impossible on the basis of property a positive result

(1) 1 crown = about 10 $\frac{1}{4}$ d. at par. (2) 1 arpent = 1.4213 acres.

(2) For the introduction of the *Rentengut* into the colonization of North Germany (provinces of West Prussia and Posen) see our issue for December 1912, *Bulletin des Institutions Économiques et Sociales*, 3rd year, no. 12, pp. 146-148.

might be reached by means of contracts for long leases. In this way a movement became apparent in Hungary, in consequence of the action of Count Alexander Karolyi and the Federation of Agriculturists, towards the formation of farmers' co-operative associations. To this movement belongs the foundation of independent farmers' co-operative associations, having more or less fixed by-laws, of registered co-operative associations, of mere societies, and of lesser groups of local co-operative credit associations belonging to the federation of the central fund of Hungarian co-operative credit associations, and of their special branches.

All this certainly shows progress towards the realization of the programme for the constitution of small farms, but the development has not yet taken a precise direction. Two of the most important corporations insisted, by means of collective manifestoes, on the necessity of interior colonization and of introducing without delay a law for its organization. It was the Federation of Hungarian Agriculturists and the Hungarian Representation of the Interests of Agriculturists of Transylvania who thus distinguished themselves.

Thus little by little the problem of interior colonization and of a rural policy became ripe for solution. All connected and contingent questions had been examined, studied and analyzed. The comparative value of the various systems of colonization had been analysed: that is to say that the question of whether colonization based on freehold or leasehold tenure were the more profitable had been investigated.

The projected Dáranyj law of 1909 was rid of certain provisions which had come to be out of date. The scheme remained legally the most complete, where its matter was concerned, and could form a point of departure for the new colonizing activity, both theoretical and practical.

In Hungary the development and success of interior colonization are facilitated by factors which have an evident importance. Above all no one can say that there is not land to be colonized. In a country where the lands which, by selling and purchasing contracts, change hands every year, reach an area of two million arpents, there is no difficulty in finding land to buy. We should add that in Hungary large estates will lack capital after the war, and owing to the lack of labour a part of their lands will have to be sacrificed to allow the organization of the remaining part with the money obtained by the sales.

The agency for colonization must be founded on the principle of decentralization. In Hungary there should be such agencies in every comitat, on the model of the provincial rural societies of Prussia (*Landgesellschaften*). The foundation of an institution of central credit will be necessary only for the financial side of the enterprise.

These principles ruled in Hungary in the matter of interior colonization until the outbreak of war. Other factors have since complicated the problem, which is, in spite of all that has been accomplished, still far from being solved in practice.

We will now examine the present attitude of public opinion and of competent influences in Hungary with regard to the problem.

*
* *

The gaps caused by the war in the population, especially in the rural population which has been more severely tried than other classes, have made the problem of colonization by ex-soldiers one of the moment. Small property is the best means of increasing the population, and soldiers fallen in the war can be best and soonest replaced by the rural population. The problem is seen to be yet more important when the value of agricultural production, and especially corn growing, in Hungary is considered.

The bishop of Stuhlweissenburg, Ottokar Prokászka, has made himself the promoter of this kind of interior colonization. At the general meeting of the Federation of Hungarian Agriculturists, which has always given special attention to interior colonization, he proposed the division into small active and independent farms, which could be granted on lease first to the invalids of the war and the widows of fallen soldiers and then to all citizens who had fought at the front, of all ecclesiastical and communal property and property subject to other services, that is a total areas of 10,000 arpents at present not adequately farmed.

His proposal was very favourably received and the problem was considered from different points of view. The Federation of Hungarian Agriculturists, as the corporation most interested, nominated two councils for the study of problems of rural policy. The reporter of the council responsible for rural policy, Dionis von Sebens, drew up two schemes for a law. The first of them is on the agrarian right of succession and tends to introduce the option of naming a single heir instead of the system of dividing real estate, on the model of the German *Anerbenrecht* (1) or right to leave undivided property to one heir. The second scheme treats of a lease for fifty years which would aim at transforming rural leases, converting the right they confer from an obligation to a property right. Yet another scheme, connected with these two, concerns the granting of credit on the security of rural implements, and would introduce into Hungarian law the system of chattel mortgages. A fourth scheme is for the distribution of lands, and aims at avoiding the abuses and speculation, now so common, which accompany the parcelling of land, by introducing a legislative measure entailing State superintendence and grants.

The council for rural policy collected data at the same time as to the largest estates on which colonization could be undertaken.

We will not report here the various attitudes of political parties and of the men most representative of Hungarian agrarian policy with reference to these proposals, and the action taken to give them the practical force which would allow of their realization. We will only state that Count Tisza in the Chamber of Magnates declared himself convinced of the usefulness of moderate interior colonization in the kingdom. He made clear

(1) For this institution, which is now applied to interior colonization in North Germany, see our issue for December 1912, *Bulletin des Institutions Économiques et Sociales*, 3rd year, no. 12, pp. 147-148.

the importance and justification of large landed property organized on modern lines, which he considered to be necessary to the victualling of the urban populations and to provide a model of farming technique. But small property is a matter of urgent interest to the increase of the population, for small properties supply the labour of which there will be a double need after the war. In deference to this principle Count Tisza affirmed that the government intended, and legislation contemplated, stimulating an increase of small farms where conditions of the soil allowed of them, and especially where there were many large properties insufficiently farmed.

It should be remembered that in Hungary the importance and future of interior colonization depend less on the soil than on capital. Land exists in abundance. The greatest difficulty is to find mortgagees, and to obtain personal credit and credit for the conduct of the farm.

A very recent development of the problem we are considering was the introduction into parliament of two proposals when the projected law as to war taxes was being discussed. Latterly in Hungary many stock companies, and societies of capitalists who are generally foreign providers, have bought several million hectares (1) of land, being influenced by the promise in the projected law of certain facilities with regard to the taxation of their capitalized property. Count Maurice Esterhazy therefore proposed to the government to bring the projected law as to colonization before parliament before the tax on such property was imposed.

To complete these measures Marquis George Pallavicini proposed that two ordinances should be adopted, which would rule that the State should have a right of pre-emption whenever there was a sale of land, and that the right to buy lands should be limited, when foreigners or corporations using foreign money were concerned. The cases of allowing lands to pass to the peasants and allowing them to pass to speculating capitalists are indeed very different.

The two proposals were rejected by parliament, but they are none the less a clear sign of a will to reach in the problem of interior colonization a concrete solution which will take into account the needs to which the war has given rise.

(1) 1 hectare = 2.47 acres.

MISCELLANEOUS INFORMATION RELATING TO AGRICULTURAL ECONOMY IN GENERAL, IN VARIOUS COUNTRIES.

CANADA.

DISCHARGED SOLDIERS AND AGRICULTURE. — *Canadian Finance*, Vol. VIII, No. 13,
4 July 1917.

A census is now being taken of Canadian soldiers overseas, and on this it should be possible to base an estimate of those inclined to agriculture. The card issued for the purpose of the National Service Commission includes spaces to be filled up with a man's name, age, unit and rank, postal address before enlistment, and province; and also asks a number of questions, among which are the following: "Is your old position open for you on your return to Canada in fit condition? Do you propose to make your home in Canada after the war? Do you wish to take up farming as an occupation? Have you ever worked on a farm? If so, how long? How much money do you expect to have at your disposal on your return to Canada? Do you desire to take advantage of any available scheme of assisted agricultural settlement? Would you, if necessary to gain experience, work for prevailing wages on a farm after your return, providing your dependents were in the meanwhile given the same support as they now receive?"

To provide for the returned soldiers desiring an agricultural training the government of *Alberta* has arranged to keep one of the provincial schools of agriculture open throughout the year. Ordinarily these schools are closed from 1 April to 1 November. The school chosen is at Olds, fifty-eight miles north of Calgary and on the Edmonton line. The men will receive in it twelve months' instruction, and may choose whether they will do so continuously for a summer and a winter, or in two winter courses separated by an interval which they can spend on a farm.

In *Saskatchewan* the commission has arranged for the returned men to be trained at the agricultural college of the provincial university at Saskatoon, where shorter and more intensive courses of instruction than those provided for ordinary students have been planned for them.

In *Manitoba* the Military Hospitals Commission has taken over the old agricultural college at Winnipeg, and soldiers will be able there to obtain instruction and practice in many branches of work on the land. Poultry raising on a large scale will probably be taken up at this college with the co-operation of the Produce Association of Canada. A deputation of the latter body has visited the commission at Ottawa and pointed out that there are considerable opportunities for partly disabled men in the business of marketing the produce of poultry farming, as in testing and grading eggs

and grading and packing poultry. The old college at Winnipeg is equipped with greenhouses for winter gardening. It has also a machinery hall, one hundred feet square, where men will be taught to use and repair farm machinery of all kinds. Men able to do this are in great demand, especially in the west where tractor farming has been developed on the largest scale. The Winnipeg representative of big implement houses are co-operating in the work of instruction by lending without charge tractors, threshing machines, gasoline engines and other modern agricultural appliances.

The great re-education centre for *Ontario* at Guelph, which has just been taken over by the Military Hospitals Commission from the provincial government, is fully equipped for the most thorough agricultural training. The property covers 850 acres, nearly all available for this purpose and largely already under cultivation. There are on it a large greenhouse for gardening under glass, a model dairy barn and up-to-date machinery; and live stock of all kinds complete the equipment for stock farming.

FRANCE.

1. THE CANCELLING OF RURAL LEASES.

A law of 17 August 1917 sanctions the cancelling, without payment of indemnity, of rural leases, in the interest of lessees or their heirs placed in certain circumstances. By Article 2 of this law when the lessee of a rural holding is killed by the enemy, or dies of his wounds or of an illness contracted or aggravated while he is serving, his heirs may demand, by registered post within three months of the promulgation of the law, of his death or of the official intimation thereof, that his lease be cancelled. The same privilege exists in the case of: 1) a lessee who has been discharged because of wounds received or an illness contracted or aggravated while he was serving, and who is not in a condition to continue to cultivate the leased real estate; 2) a lessee whose wounds or illness are consequent on the war although he has not been with the colours; 3) the widow or heirs of a lessee in the latter case. In all these cases a full right to free cancellation will exist, and the cancellation will have effect at the end of a customary term, delays for leave which may not exceed a year being observed. Cancellation can be given at the demand of the wife or children, or failing them of the parents or grandparents of a lessee called to the colours and officially stated to be missing or killed. Further, for six months after the cessation of hostilities and the return of the lessee to his home the latter may ask to have his lease cancelled, being responsible for proving, if the point be disputed, that he can no longer cultivate the real estate let to him, owing to wounds or an illness he has contracted while with the colours, or to circumstances of the war which have affected him although he has not been in the army. He will not need to pay any indemnity. Finally every lessee of a rural holding may, even if he be not mobilized and be outside the cases contemplated by common law and the new law, obtain a remittment or reduction of rents and

various payments falling due during the war and in the year after the war, if he have through the war suffered losses which have lessened the total value of his farm. All these provisions apply whatever be the form of a contract — lease for rent or for half or other share of profits —, and even to leases of fishing and shooting rights and to every concession to individuals, or fishing or sporting societies, in rivers, streams, canals, etc.

* * *

2. THE DEPARTMENT OF AGRICULTURAL LABOUR AT THE MINISTRY OF AGRICULTURE. — Announcements made by M. Henry Girard, chief assistant of this department, at the annual general meeting of the *Société d'Economie Sociale*, reproduced in *La Réforme Sociale*, 1 to 15 September 1917, pp. 192 to 196.

By a decree of 3 January 1917 the then Minister of Agriculture, M. Clémentel, formed a department for the supply and supervision of agricultural labour. His accomplishment was continued and developed by M. Fernand David. We will outline the organization of the new department, its activity and the principles on which it rests.

1. *The Organization of the Department.* — The organization tends to a decentralization of labour, which aims at hastening the progress of business and allowing it to be transacted locally, where it is understood and can be given its rightful importance. There is a central organization with agencies in the departments.

The central organization has three sections.

The first of these has charge of relations with the military authority from whom it must obtain, individually or collectively, that assistance of mobilized men and even of prisoners of war which is indispensable to the works of agriculture and to subsidiary industries.

In view of the impossibility of restoring to agriculture all the labour which it lacks it has been necessary to form a second section which has the duty of collecting from every possible place available labour, whether that of the unemployed, of refugees, of the physically unfit or of aliens.

Finally a third section detaches and distributes the oldest soldiers whose employment on agriculture is allowed by the Ministry of War. This section also sets on foot the investigations which become necessary when such a detachment is made on insufficient pretexts.

The head of the department co-ordinates the three sections. Side by side with him a department for technical research connected with agricultural labour is at work; and a bi-monthly bulletin, *La Main-d'œuvre agricole*, is issued. Five thousand copies of each issue of this journal appear, and they are sent to all who ought to have general ideas as to the labour supply and know the resolutions and publications relative to it. The central organization and the agencies in the departments are thus permanently connected.

The latter are the commissions of agricultural labour. Each has the *préfet* as chairman and consists otherwise of the director of the agricultural

Services, the representative in the department of the military authority and three well known farmers, and also of a member of the General Council wherever a question relative to the prisoners of war is on the agenda of a meeting.

The central organization is connected with the other administrations for the obtaining of labour, which it distributes among the departments of France. The departmental commissions make the subsequent detailed distributions, deal with all local questions as to the labour supply, and correspond with the central organization whenever they cannot solve their problems on the spot.

The deflection of the oldest soldiers to agriculture has hitherto brought 100,000 men back to the land, and will doubtless bring others. A certain number of agricultural artisans obtain temporary exemption from military service, and soldier agriculturists receive special leave. Thus agriculture has the benefit of a considerable number of working days which ought to be a source of general profit. To make sure of this extra labour supervision has been instituted.

This supervision is as simple as possible, first because the claims of agriculture are always moderate, and secondly because a tiller of the soil naturally and without a perpetual spur works with incomparable industry. A general supervisor of agricultural labour perpetually travels about France in order to get into touch with the officials, who are with the fewest possible exceptions themselves cultivators, and of whom one in each department superintends the military agricultural labour. These officials are attached to the departmental commissions of agricultural labour, and the circuits they make bring them into relation with an inspector in each canton, who is, whenever possible, a well disposed farmer.

2. *The Activity of the Department.* — Without entering into details it may be said that the activity of the department has three essential forms :

a) General measures for allowing the continuance of agriculture are initiated ;

b) The department intervenes in particular cases ;

c) Agricultural labour is organized for the future.

The general measures are based on the need of labour revealed by investigations and by the wishes which the departmental authorities express. Information is given in advance to the Ministry of War as to the time, the duration and the importance of given works, in order to allow appropriate steps to be taken at the right moment. Specific requests are made as to definite categories of mobilized men, whether distillers, sugar-refiners, sericulturists, shepherds, threshing contractors, etc., or artisans necessary to rural life, blacksmiths, smiths who mend agricultural implements, cartwrights or harness-makers. The department is there to provide for the future. In agreement with the Ministry of the Interior it organizes offices of immigration on the frontiers.

Unfortunately, in spite of its proposals and the general directions of the ministers concerned, a certain number of agriculturists derive no benefit from the steps taken in their favour. In their case the department in-

tervenes directly, calling the attention of the military authority to particular cases and seeking to give information as to agricultural needs.

Finally the department is preparing, from the point of view of agricultural labour, for the period after the war, adducing a mass of documentary evidence. It aims at maintaining agricultural production and seeking to increase it with the smallest possible amount of human labour power. For this end it must study the agricultural districts, estimate the importance of their various crops, see if these are produced in the most favourable conditions, and, if not, discover how to transform them. It must investigate the possibility of ensuring necessary labour to farmers by causing a return to the land, and do this by rendering country life attractive, organizing immigration, and greatly improving agricultural material. The department is at the fountain-head of information. It has already collected very interesting information, is actively following up its work, and expects to attain to fruitful results.

3. *The Principles on which the Department Works.* — The department of agricultural labour considers that the problem of the necessary labour is technical, and that it must be solved not by following general formulae but practically, on the experimental method, taking into account economic facts and conditions.

It considers that no gulf must be fixed between the agricultural labourer, the employee and the master, but that all concerned must be recalled to their duty.

Doubtless after the war the department will not survive in its present form, but will continue as a national office of agricultural labour which will co-operate with the State and the large trade groups. Thus, at a time when the need for it will be acutely felt, it will be able to continue its work. It will be in correspondence with offices of agricultural labour in the departments of which the existing commissions are the germ. It will possess powers, independence and means of action.

NOTICES RELATING TO AGRICULTURAL ECONOMY IN GENERAL IN VARIOUS COUNTRIES.

ANNUAIRE INTERNATIONAL DE LÉGISLATION AGRICOLE (*International Yearbook of Agricultural Legislation*), published by the International Institute of Agriculture, 6th year, 1915, Rome, Printing Press of the International Institute of Agriculture, 1917.

The sixth volume of the International Yearbook of Agricultural Legislation has lately appeared. It gives a sufficiently detailed picture, as complete as possible, of the laws and decrees of interest to agriculture which have been promulgated in 1916. The importance and interest of this publication at the present moment are evident. The new conditions arising out of the war have rendered necessary in nearly every department of social life legislative provisions which deeply affect the previous organization. The increasing difficulty of provisioning, the lessening of oversea trade communications, the insufficient production following on the lack of labour and the mobilization of millions of persons taken from their habitual occupations — all these things have given to agricultural legislation, not only in belligerent but also in certain neutral countries, a quite first-rate importance.

The new state of affairs which the war has caused in most States is reflected in nearly every part of the yearbook. Thus the first part (statistics) includes the measures which aim at making stocks consistent with the area to be brought under cultivation; the second part (trade) the rules as to provisioning and consumption; the third part (financial) the measures which give relief from or suppress certain taxes and contributions; the fourth part (vegetable production) the copious legislation aimed at encouraging the employment of uncultivated or abandoned lands, that is at stimulating farmers to increase agricultural production; the fifth part (animal production) the measures aimed at increasing stock breeding and decreasing the consumption of animal foodstuffs; the sixth part (organization) the formation of new agencies or modification of those in existence to meet, as effectively and rapidly as possible, the special needs of the moment. The eighth part shows the varied provision for thrift, insurance and credit, and the ninth the measures affecting rural property: all these aim chiefly at supplying credit to farmers, repairing damage due to the war, and granting lots of land to discharged soldiers. The tenth part contains the measures passed by parliaments and governments for the prorogation of the validity of agricultural contracts, or the temporary modification of the provisions governing them, in view of the particular conditions in which the present state of affairs has placed most agricultural families. There are also

the seventh part, which concerns diseases of plants and field pests, and the eleventh part which concerns rural hygiene and the control of agriculture.

The second, fourth and fifth parts are, as we have shown, of capital interest to any wishing to follow in all its details the legislative movement which the European crisis has provoked in the matter of the food supply. These parts of the yearbook group everything concerned with the trade in grain and provisioning in general, and the trade in other vegetable foodstuffs, seeds, manures, oleaginous fruits, textile plants, tobacco, live stock and animal products and agricultural machinery; the facilities granted for importation and the restrictions placed on exportation; the measures providing against and combating the rise of prices, unfair competition and commercial frauds; the measures regulating, from a legal point of view, commercial contracts; those intended to prevent the anticipatory sale of harvests; the transport of vegetable and animal products; the regulation of the industries of vegetable products and chemical manures; and finally the regulation of crops in wartime.

This last chapter contains, for instance, a notable German decree of 4 April 1916 which makes the provisions of a decree of 9 September 1915 as to compulsory cultivation applicable to urban lands capable of being cultivated. Another German decree, dated 13 April 1916, obliges owners of forests and other lands not agriculturally employed to allow such woods and lands to be used as pasturage. The French decree of 6 October 1916, as to the obligation to bring abandoned lands under cultivation, is also reproduced; as are the Italian decrees of 19 October and 14 December 1916, which respectively encourage increased corn growing, and by means of itinerant chairs of agriculture organize propaganda in favour thereof. There is also the text of the Russian decree of 16-29 March 1909, which was again put in force last year, as to the repayment of State loans to farmers for ensuring the provisioning of the country.

Numerous provisions included in the yearbook concern agricultural co-operation, insurance and credit. We will mention a law of the Philippines as to the formation and working of agricultural co-operative societies, a decree of the Regency of Tunis as to associations of owners of olive plantations, a law of Alberta (Canada) as to women's agricultural associations or farmwives' clubs, a Japanese decree as to the foundation and activity of co-operative societies, and a Portuguese decree regulating stock-farming syndicates. As to insurance, there are the Austrian ordinance of 11 September 1916 which modifies the compulsory provisions of the decree of 22 November 1915 as to the insurance contracts made by small mutual insurance societies or associations for the mutual insurance of live stock; the Danish law of 6 July 1916 which applies the principle of compulsory insurance to the accidents of labour, including the labour of agriculture, forestry, horticulture, stock farming and trade in live stock, the dairy industry, peat lifting, the threshing of grain, and milling; the French law of 25 November 1916 as to the insurance of men injured in the war who are employed in industry; and the Swedish law of 17 June 1916 which makes insurance against the accidents of labour compulsory. Finally as regards credit, there are a

Chinese decree of 8 October 1915 as to agricultural and industrial banks ; a decree of Costa Rica of 6 June 1916 setting up a mortgage department in the international bank ; the federal law of the United States as to agricultural credit ; and the measures passed in Italy to encourage agriculture in the southern provinces.

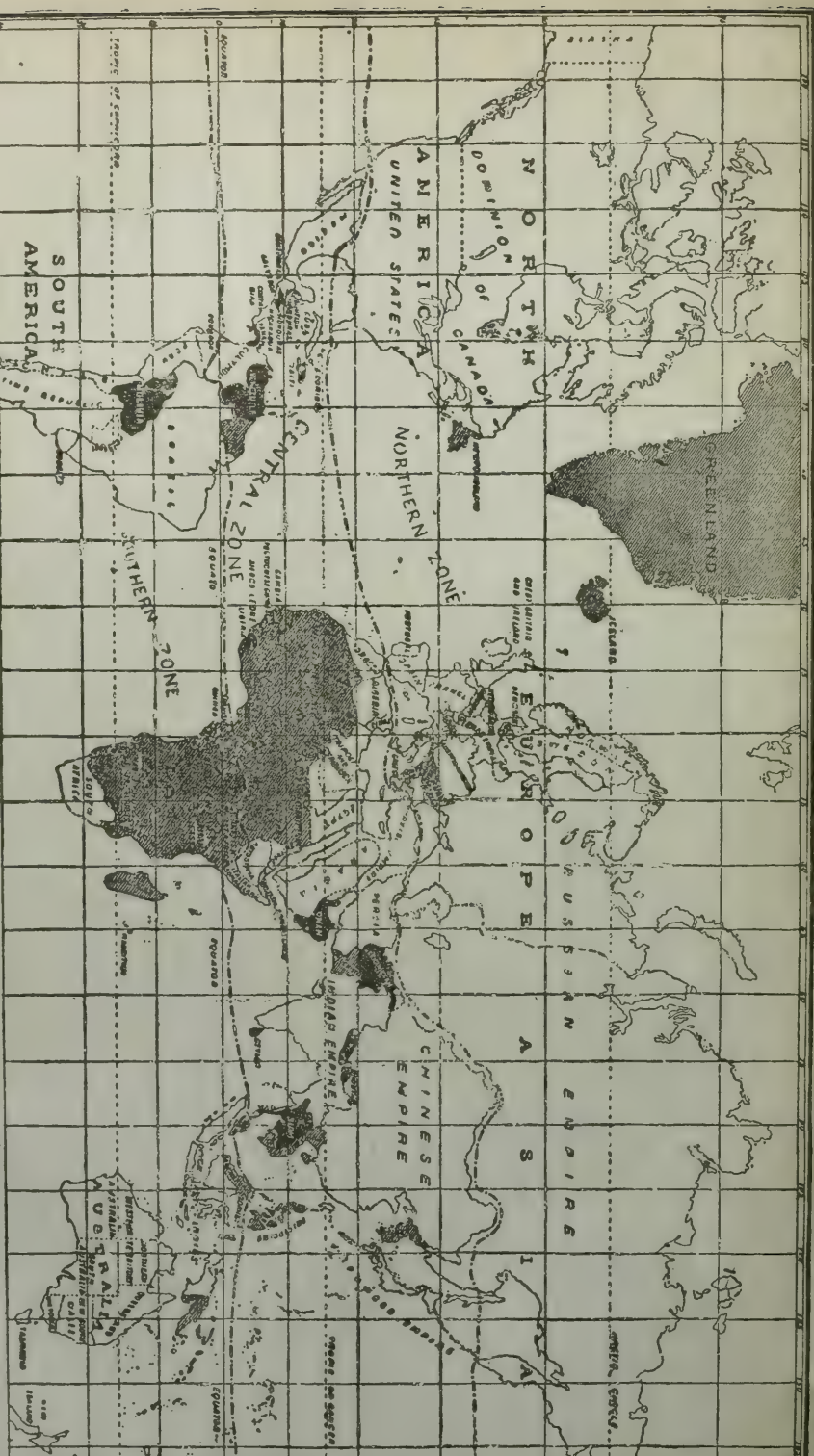
The chief of these provisions have already been noticed or analysed in this review, to the readers of which the yearbook is indispensable.

The part of the yearbook given up to rural property comprises the strictly legal provisions which define and regulate rights of property, of usufruct and of security in real estate, prescribe what formalities must be observed when these rights are transferred and when their holders are to be determined, especially in the interest of third-parties ; and which establish the procedure to be followed when an execution is to have effect on real estate or chattels. The same part includes provisions of a more specially social or political character, tending to influence directly the distribution of real estate and allow a fuller employment thereof. The following brief enumeration will give an idea of the fulness and usefulness of this part of the yearbook, which could alone justify the publication of the whole. The chapter on the methods of acquiring and transferring rural property gives the text of an Austrian decree which limits for the period of the war the free right to sell agricultural or forest land. The second chapter, on the formation and preservation of small rural property, contains a Danish law authorizing the State to grant loans to co-operative societies which aim at procuring small properties for their members ; and federal laws of the United States regulating the concession of homesteads in Alaska and the formation of stock-farming homesteads. The third chapter, on usufruct charges and security rights burdening rural properties, gives the text of a German decree specially providing for the exercise of rights depending on mortgages or rents, and of an Italian law as to emancipation from rights of common. The fourth chapter, on cadasters and land registers, contains a decree instituting an office for the preservation of landed property in each of the colonies of the group of French Equatorial Africa ; the unified text of the laws of New Zealand on the conveyance of land, based on the Torrens system ; and a Mexican law as to the formation of a cadaster. The fifth chapter is given up to interior colonization and shows strongly the influence of present circumstances. Thus it brings together a Bavarian law encouraging colonization by discharged soldiers ; and a British law and laws of South Australia, New South Wales and British Columbia having the same object. A Danish law, which occurs in chapter VI., aims at regulating lawsuits affecting real estate. The seventh chapter groups miscellaneous measures which concern property, among them a law of the German Empire as to the repair of war damages suffered by owners of real estate or chattels ; a Prussian decree regulating the redistribution in parcels of certain landed properties in the zones of East Prussia ravaged by the war ; that part of the Austrian ordinance, as to the third " novel " modifying the civil code, which is of interest to real estate, as well as certain provisions as to selling and letting contracts ; those parts of the new Brazilian code which concern agriculture ;

a Chinese law on the expropriation of lands ; a British law as to the management of lands occupied by the State for the needs of national defence ; and a Swedish law limiting the right of foreigners to acquire real estate.

Where the less important provisions are concerned the yearbook gives only their original title and its translation into French; of the others it gives either the whole text or extracts therefrom. In order that the reader may apprehend the entire content of the book, which is of 1250 pages, it begins with an analytical translation of LXXVII. pages, published in five languages — French, English, German, Italian and Spanish, and in order that it may be easily consulted it ends with a chronological table, arranged by countries, and an alphabetical table of contents





EXPLANATION

- ☐ Countries and Colonies adhering to the Convention of the 7th June 1905.
 by which the International Institute of Agriculture was founded.
- ☒ Non adhering Countries.
- Line showing geographical zones established by the
 Institute in order to facilitate the collection of statistics

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1. ANNUAIRE INTERNATIONAL DE STATISTIQUE AGRICOLE POUR 1910 (International Year Book of Agricultural Statistics, 1910). (1912, XLVIII + 327 pages, 8vo)	Fr. 5 —
Do. Vol. II, Years 1911-1912. (1914, XXXIV + 624 pp. 8vo)	5 —
Do. Vol. III Years 1913-1914. (1915, XLIV + 788 pp. 8vo)	5 —
Do. Vol. IV, Years 1915-1916. (1917, I, + 950 pp. 8vo)	10 —
2. ANNUAIRE INTERNATIONAL DE LÉGISLATION AGRICOLE, 1 st Year, 1911, (International Year Book of Agricultural Legislation, 1911). (1912, 1, 122 pages, 8vo)	10 —
Do. 2 nd Year, 1912. (1913, 994 pages, 8vo)	10 —
Do. 3 rd Year, 1913. (1914, 1, 114 pages, 8vo).	10 —
Do. 4 th Year, 1914 (1915, LXXVIII + 1,020 pages, 8vo)	10 —
Do. 5 th Year, 1915 (1916, LXXVVI + 1,460 pages, 8vo).	10 —
Do. 6 th Year, 1916 (1917, LXXXVII + 1458 pages, 8vo).	10 —

D. — OTHER PUBLICATIONS.

(a) Publications of the Library.

1. CATALOGUE DE LA BIBLIOTHÈQUE. ANNÉE 1909 (Catalogue of the Library, 1909). (356 pages, 8vo)	Fr. 3 —
2. LISTE DES REVUES ET JOURNAUX RÉGULIÈREMENT REÇUS PAR L'INSTITUT, 1913 (List of Reviews and Papers regularly received by the Institute, 1913) (84 pages, 8vo)	0,50

(b) Publications of the Bureau of Statistics.

(1) Various publications

1. L'ORGANISATION DES SERVICES DE STATISTIQUE AGRICOLE DANS LES DIFFÉRENTS PAYS, Vol. I (The Organization of the Agricultural Statistical Services in the Different Countries, Vol. I). (1910, 446 pages, with tables in addition to the text, 8vo)	4 —
Do. Vol. II, (1913, 146 pages, 8vo)	2 —
2. RECUEIL DE COEFFICIENTS POUR LA CONVERSION DES POIDS, MESURES ET MONNAIES AU SYSTÈME MÉTRIQUE DÉCIMAL (Collection of Coefficients for the Conversion of Weights, Measures, and Money Values into the Decimal metric System). (1914, 84 pages, 16mo)	1 —

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3. LES BOURSES DES PRODUITS AGRICOLES DE HAMBOURG ET BUDAPEST (The Agricultural Produce Exchanges of Hamburg and Budapest). (1913, 53 pages, 8vo)	1 —
4. NOTES SUR LES STATISTIQUES DU COMMERCE EXTÉRIEUR DANS LES DIFFÉRENTS PAYS: Publications Statistiques, Territoires, Sortes de Commerce, Provenances et Destinations des Marchandises (Notes on the Statistics of Foreign Trade in the Different Countries: Statistical Publications, Territory, Kinds of Trade, Source and Destination of Goods). (1914, 96 pages, 8vo)	2 —
5. LA RÉPARTITION AGRICOLE DES TERRITOIRES DES DIFFÉRENTS PAYS (Areas under Crops in the Different Countries). (1914, 310 pages, 8vo)	5 —

(3) Other publications.

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Part I: Co-operation and Association

JAPAN.

THE PRESENT POSITION OF CO-OPERATION IN JAPAN.

OFFICIAL SOURCE :

ZANKOKU SANGYÔ-KUMIAI GAIKYO (*The General Position of Co-operation in Japan*). Ministry of Agriculture and Commerce, Department of Agriculture, Tokyo, May 1916.

In the *Bulletin des Institutions Économiques et Sociales* issued on 30 September 1910 we published a detailed statistical report of Japanese co-operative societies. It was based on the report published by the Japanese Ministry of Agriculture and Commerce in November 1909; and therefore it could not show the beneficent effects of the new law on co-operative societies, which the Diet of the Empire approved on 8 April 1909 but which had force only from 1 January in the ensuing year.

Subsequently on 20 January and 10 September 1912 the Ministry of Agriculture and Commerce published two new statistical reports; and therefore in our issue for January 1913 we published data which brought us up to 30 June 1912. The following tables reproduce data published in Japanese in May 1916 by the Ministry of Agriculture and Commerce; and, with the exceptions indicated in the annexed notes, they show the position of co-operation on 31 December 1915.

TABLE I. — Increase in Number of Co-operative Societies, classified according to their Object.

Year	Associa- tions for credit	Associa- tions for sale	Associa- tions for purchase	Associa- tions for pro- duction	Associa- tions for sale and pro- duction	Associa- tions for sale and pro- duction	Associa- tions for purchase and pro- duction	Associa- tions for credit and pro- duction	Associa- tions for credit and pro- duction	Associa- tions for credit and pro- duction	Associa- tions for credit and pro- duction	Associa- tions for credit and pro- duction	Associa- tions for credit and pro- duction	Associa- tions for credit and pro- duction	Total
1900.	13	1	2	—	3	—	1	1	—	—	—	—	—	—	21
1901.	191	12	36	4	14	2	—	4	—	—	—	—	—	—	263
1902.	331	37	71	11	28	8	15	11	—	—	—	—	—	—	512
1903.	549	61	128	16	54	20	25	17	—	—	—	—	—	—	870
1904.	751	80	190	30	90	38	24	29	—	—	—	—	—	—	1,232
1905.	986	92	273	38	142	63	30	47	—	—	—	—	—	—	1,671
1906.	1,292	126	446	48	271	81	46	82	5	41	1	24	1	5	2,470
1907.	1,543	166	597	53	363	101	56	112	13	188	3	135	1	3	3,363
1908.	1,734	175	714	67	419	113	52	170	21	470	7	321	1	11	4,391
1909.	1,966	200	756	63	460	125	49	214	30	838	10	702	4	19	5,690
1910.	2,226	217	772	78	503	136	49	222	381	1,239	14	1,062	14	26	7,308
1911.	2,534	225	787	114	535	150	52	234	395	1,626	15	1,459	22	40	8,663
1912.	2,673	220	673	117	510	138	44	245	384	1,995	27	1,948	38	45	9,683
1913.	2,767	233	641	138	491	138	43	241	378	2,252	32	2,232	59	45	10,455
1914.	2,930	224	599	143	498	139	41	242	370	2,479	37	2,461	73	46	11,160
1915.	3,015	234	535	133	461	141	37	230	400	2,582	39	2,609	90	57	11,509
Percentage . .	26.2	2.0	4.7	1.1	4.0	1.2	0.3	2.0	3.5	22.5	0.3	22.7	0.8	0.5	100.0

TABLE II. — *Increase in Number of Members (1).*

Year	Number of associations	Total number of members	Average number of members in an association	Number of members classified by occupation				Percentage of the members according to the classification adopted			
				Agriculture	Industry	Commerce	Various	Agriculture	Industry	Commerce	Various
1903	870	68,730	79	55,266	3,237	6,564	3,663	80.4	4.7	9.6	5.3
1904	1,232	93,632	76	75,289	4,410	8,942	4,991	80.4	4.7	9.6	5.3
1905	1,671	137,022	82	113,139	6,467	11,729	5,687	82.6	4.7	8.6	4.1
1906	2,470	224,770	91	188,020	7,530	15,352	13,868	83.7	3.3	6.8	6.2
1907	3,363	312,759	93	250,708	14,543	21,705	25,803	80.2	4.6	6.9	8.3
1908	4,391	493,010	110	398,352	23,418	32,391	38,849	80.8	4.7	6.6	7.9
1909	5,690	631,590	111	510,609	29,369	40,232	42,380	82.4	4.6	6.4	6.7
1910	7,308	789,264	108	646,407	31,570	50,513	60,774	81.9	4.0	6.4	7.7
1911	8,663	944,267	109	780,909	37,015	62,605	63,738	82.7	3.9	6.6	6.8
1912	9,683	1,074,813	111	880,272	42,993	73,087	78,461	81.9	4.0	6.8	7.3
1913	10,455	1,223,235	117	1,006,722	53,822	75,841	86,850	82.3	4.4	6.2	7.1
1914	11,160	1,350,360	121	1,104,840	55,800	89,280	100,440	81.8	4.1	6.6	7.5
1915	11,509	1,392,589	—	1,139,391	57,549	92,072	103,581	81.8	4.1	6.6	7.5

(1) The total number of members has been calculated by multiplying the average number of the members of the associations covered by the enquiry and active at the end of each year by the number of such associations. Since however the enquiry was not completed for 1915 the average number of members in 1914 was adopted for that year.

TABLE III. — Number of Co-operative Societies classified according to their Object and Organization.

Year	Number of associations classified according to their object				Percentage				Number of associations classified according to their organization				Percentage		
	Associations for credit and other operations	Associations for sale and other operations	Associations for purchase and other operations	Associations for production and other operations	Associations for credit and other operations	Associations for sale and other operations	Associations for purchase and other operations	Associations for production and other operations	Limited liability	Unlimited liability	Limited liability with guarantee	Total	Limited liability	Unlimited liability	Limited liability with guarantee
1903	549	152	224	78	63.1	17.5	25.7	9.0	327	529	14	870	37.6	60.8	1.6
1904	731	237	333	121	61.0	19.2	27.0	9.8	465	754	13	1,232	37.8	61.2	1.0
1905	986	344	492	178	59.0	20.6	29.4	10.7	590	1,067	14	1,671	35.3	63.9	0.8
1906	1,370	595	916	265	55.5	24.1	37.1	10.7	1,026	1,405	39	2,470	41.5	56.9	1.6
1907	1,915	920	1,483	538	56.9	27.3	44.3	10.6	1,499	1,788	76	3,363	44.6	53.2	2.2
1908	2,681	1,335	2,273	536	61.1	30.4	51.8	12.2	2,089	2,214	88	4,391	47.6	50.4	2.0
1909	3,823	1,989	3,292	738	65.1	35.0	57.9	13.0	2,917	2,637	136	5,690	51.3	46.3	2.4
1910	5,331	2,904	4,247	908	72.9	39.7	49.8	12.4	4,204	2,938	166	7,306	57.5	40.2	2.3
1911	6,566	3,495	5,208	1,102	75.8	40.3	60.1	12.7	5,235	3,235	193	8,663	60.4	57.4	2.2
1912	7,736	4,109	6,086	1,280	79.9	42.4	62.8	13.2	6,105	3,368	210	9,683	63.0	34.8	2.2
1913	8,330	4,537	6,710	1,461	81.6	43.4	64.2	14.0	1,805	3,340	220	10,455	65.1	32.8	2.1
1914	9,274	4,885	7,244	1,599	83.1	43.8	64.9	14.3	7,333	3,602	225	11,160	65.7	32.3	2.0
1915	9,738	5,111	7,452	1,673	84.6	44.4	64.8	14.5	7,935	3,644	230	11,509	66.2	31.7	2.0

TABLE IV. — *Movement towards increase of Capital of Co-operative Societies (1).*

Year	Total amount of paid-up shares (in yens)	Total amount of reserve funds (in yens)	Total amount borrowed (in yens)	Total amount of savings (in yens)	Total (in yens)	Average capital of an association (in yens)	
						Associations for cre- dit and associations for credit and other operations	Other associations
1903	1,440,344	140,057	298,813	285,303	2,164,517	2,679	2,159
1904	2,053,388	294,911	423,146	402,776	3,174,221	2,784	2,248
1905	2,204,142	427,754	774,791	692,964	4,559,651	3,016	2,314
1906	3,477,485	677,237	1,276,540	1,400,152	6,831,414	3,221	2,109
1907	4,988,457	999,406	2,596,629	2,922,955	11,505,447	4,078	2,552
1908	6,749,791	1,060,604	4,375,254	4,318,624	16,525,363	4,395	2,773
1909	8,355,651	1,443,382	4,324,770	6,313,611	20,467,414	4,141	2,482
1910	11,093,514	2,090,088	4,837,896	9,873,012	27,894,540	4,318	2,466
1911	13,382,168	2,618,164	8,246,566	14,437,660	38,084,558	5,032	2,833
1912	16,401,665	3,858,647	10,992,626	20,194,734	51,417,072	5,837	3,227
1913	19,443,546	5,208,618	13,729,130	24,538,328	62,719,622	6,529	3,652
1914	22,320,000	6,863,400	16,449,840	26,040,970	72,574,210	7,179	2,028
1915	23,018,000	7,078,035	16,904,266	28,288,890	75,349,191	—	—

(1) This table shows the amount at the end of each year, calculated by the method explained in the note to table II.

TABLE V. — *Development of the Business of Co-operative Societies (I).*

Year	Amount of circulating capital (in <i>yens</i>)	Total amount of loans (in <i>yens</i>)	Credit Transactions		Total value of sales made (in <i>yens</i>)	Total value of purchases made (in <i>yens</i>)
			Total amount of savings (in <i>yens</i>)	Total amount of loans made (in <i>yens</i>)		
1903	3,509,393	817,318	1,290,347	2,563,719	2,157,694	223,271
1904	4,657,356	910,997	1,412,454	3,314,394	3,814,825	426,591
1905	7,803,908	2,288,130	2,341,174	4,678,920	4,387,295	1,538,791
1906	12,263,603	3,380,729	4,728,152	7,159,160	6,912,232	2,619,165
1907	25,364,695	8,072,606	11,304,226	15,410,188	10,410,989	5,167,653
1908	34,797,867	12,577,677	14,418,686	19,436,357	19,691,047	9,440,635
1909	44,899,176	15,528,232	19,571,963	28,510,972	17,145,359	7,914,488
1910	56,671,558	16,757,412	26,724,729	34,806,099	18,917,207	10,794,472
1911	80,056,032	25,789,751	37,971,178	49,704,620	32,049,655	16,502,072
1912	110,900,883	35,565,313	55,975,678	71,306,503	32,444,911	22,132,348
1913	139,342,701	46,165,453	68,725,093	91,152,587	35,465,670	27,674,315
1914	155,171,470	52,027,920	73,960,150	103,120,510	37,204,100	26,346,428
1915	161,411,543	53,654,958	77,660,550	108,237,870	38,925,376	27,121,109

(1) As it was impossible to show in figures the importance of the business of the associations for production this has not been taken into account in this table. It has been drawn up by the method explained in the note to table II. The amount of the circulating capital has however been calculated by adding to the amount of the paid-up shares and the reserve funds at the end of each year the amount of the loans and savings paid each year, including sums carried over from the preceding year.

TABLE VI. — *Movement towards the Federation of Co-operative Societies.*

a) Increase in number of federations, classified according to their object.

Year	Credit	Sale	Purchase	Sale and purchase	Credit and sale	Credit and purchase	Credit sale and purchase	Credit sale purchase and production	Total
1910	3	2	—	—	3	1	3	1	13
1911	9	1	1	—	3	4	4	1	23
1912	15	2	1	1	3	5	5	2	34
1913	19	2	3	2	3	12	10	2	53
1914	25	2	6	3	3	10	13	1	63
1915	30	3	7	4	4	9	13	1	71

b) Movement of the business of federations (1).

Year	Total number of federations	Number of federations examined	Number of associations federated	Total amount of paid-up shares (in yens)	Amount of reserve fund (in yens)	Total amount borrowed (in yens)	Total amount of savings (in yens)	Amount of loans made (in yens)	Total value of sales (in yens)	Total value of purchases (in yens)	Excess (in yens)
1912	34	28	1,164	151,649	32,083	5,858,823	805,374	1,085,776	7,955,628	126,899	24,443
1913	53	47	2,043	227,784	48,805	7,534,625	1,310,018	1,865,764	8,400,736	119,208	47,843
1914	63	55	2,648	325,824	85,528	7,750,678	1,475,148	2,376,087	8,998,584	317,077	97,567

(1) This table does not give the figures for all the federations existing at the end of each year but only the figures for the federations covered by the enquiry.

TABLE VII. - *General View of Co-operative Societies*

Prefecture	Total number of associations at the end of December 1914	Number of associations examined	Total number of members	Total amount of paid-up shares (in yens)	Total amount of reserve fund (in yens)	Total amount borrowed (in yens)	Excess (in yens)
Hokkaidô	144	95	7,478	114,163	39,096	125,934	32,549
Tôkyô	94	73	13,382	282,518	84,173	139,500	29,209
Kyôto	223	203	33,825	606,104	235,501	1,501,130	65,604
Ôsaka	120	97	14,908	239,439	115,732	971,265	26,459
Kanagawa	123	109	11,595	219,357	75,106	131,385	27,484
Hyogo	690	617	60,460	1,246,457	346,557	2,656,112	112,366
Nagasaki	128	103	17,789	138,730	37,583	474,326	11,062
Niigata	420	396	56,743	1,182,450	287,568	1,329,274	144,547
Saitama	345	327	44,036	814,061	229,045	906,501	80,567
Gunma	483	449	44,642	768,185	176,459	1,227,812	59,451
Chiba	343	339	34,713	748,808	154,727	431,142	78,325
Ibaraki	347	274	21,310	503,763	182,387	566,591	68,882
Tochigi	193	154	17,466	578,685	195,724	688,775	73,686
Nara	124	115	8,266	158,410	35,807	183,596	18,786
Miye	340	274	35,368	520,899	110,185	1,022,217	60,490
Aichi	396	405	33,654	599,016	151,700	1,168,172	76,622
Shizuoka	237	233	29,557	801,397	309,147	732,315	107,205
Iamanashi	134	127	7,322	194,208	70,272	860,074	21,198
Shiga	111	113	33,633	363,431	111,120	865,208	41,875
Gifu	249	247	24,518	412,510	101,380	565,052	53,174
Nagano	486	449	34,737	757,384	313,126	4,417,532	85,351
Miyagi	198	181	12,047	218,898	70,557	220,509	26,447
Fukushima	357	327	25,826	671,640	267,340	2,575,034	50,112
Iwate	289	236	18,831	318,341	110,934	245,471	40,225
Acmori	322	266	18,150	331,994	98,866	557,222	44,189
Yamagato	204	181	14,960	319,769	82,611	473,458	33,825
Akita	194	205	19,713	238,711	33,055	156,777	12,160
Fukui	212	200	13,480	262,190	58,650	3,776,316	31,463
Ishikawa	176	162	8,818	140,914	35,469	385,808	16,930
Toyama	242	209	19,594	563,531	148,759	1,600,799	76,396
Tottori	182	147	22,047	263,330	95,376	1,290,068	25,601
Shimane	237	226	48,596	460,415	183,316	1,233,005	77,947
Okayama	386	348	53,036	664,752	209,585	1,144,254	110,090
Hiroshima	370	309	59,294	590,090	228,049	1,490,817	119,048
Yamaguchi	220	215	65,377	546,227	234,056	1,875,067	83,305
Wakayama	175	157	15,381	255,419	61,415	324,162	37,056
Tokushima	104	97	7,547	90,702	24,366	246,753	9,492
Kagawa	137	127	30,844	536,051	125,403	751,981	68,211
Ehime	197	177	28,266	510,110	155,706	1,501,107	76,450
Kochi	141	122	10,920	85,044	17,007	86,825	12,655
Fukuoka	217	168	24,854	440,665	123,176	384,064	65,740
Oita	249	200	16,474	171,965	46,174	206,268	15,014
Saga	173	155	12,913	194,196	65,607	568,720	37,223
Kumamoto	126	109	11,517	216,282	58,132	313,069	27,698
Miyazaki	136	90	5,963	92,583	30,516	104,781	9,134
Kagoshima	143	122	40,843	237,556	110,214	2,649,487	13,274
Okinawa	43	33	13,489	159,781	90,804	342,906	33,728
Totale	11,160	9,968	1,204,232	19,831,151	6,127,559	46,474,667	2,428,334
	10,455	9,328	1,090,475	17,169,185	4,647,149	411,89,031	2,261,592

lined, classified by prefectorates (1914).

associations examined	Credit business (in yens)		Number of associations examined	Selling business (in yens)		Number of associations examined	Buying business (in yens)		Number of associations examined	Business of production (in yens)	
	Total amount of savings	Total amount lent		Total amount of sales	Total amount of purchases		Costs of production	Costs of the year			
64	45,520	276,668	60	842,240	53	406,504	2	—	38		
39	283,633	589,529	18	32,510	50	803,392	13	424	2,995		
182	6,952,483	4,715,411	80	353,833	139	431,979	12	—	15,728		
62	2,616,940	2,097,570	22	90,989	81	481,370	4	—	330		
84	248,031	444,389	38	159,904	74	370,541	19	3,628	189		
558	4,161,197	5,733,743	299	790,910	433	1,313,111	81	384	7,983		
92	554,723	829,016	51	162,714	69	406,820	2	—	1,213		
136	3,722,467	5,168,264	124	996,798	209	385,898	32	5,614	2,297		
290	1,341,480	2,476,057	180	1,380,519	144	451,980	51	338	14,351		
369	1,228,501	1,920,749	292	8,783,812	125	351,828	107	4,510	59,797		
326	1,137,493	2,176,722	57	318,941	128	398,954	11	541	1,594		
232	681,494	1,570,584	139	425,285	195	606,888	49	4,088	2,118		
352	398,492	1,381,011	90	104,830	96	542,538	14	—	7		
103	375,987	488,015	22	12,067	53	162,873	4	18,281	16		
243	2,306,690	2,819,081	158	721,260	229	816,503	29	9,234	7,643		
363	2,917,560	2,986,033	104	1,574,836	341	1,190,604	25	65	10,819		
183	1,647,357	2,224,132	114	651,244	163	544,250	46	—	46,118		
104	168,752	512,447	20	657,709	74	156,484	12	—	897		
102	2,936,345	2,307,310	81	1,206,864	87	444,005	11	421	207		
209	1,181,007	1,644,662	101	346,706	196	467,328	41	—	8,940		
331	1,074,984	5,679,188	143	1,265,130	298	558,671	82	1,124	7,004		
168	110,589	585,472	68	69,672	127	149,995	23	—	228		
281	560,654	2,321,860	73	1,599,189	203	481,733	18	21,297	1,479		
184	124,559	879,171	97	185,766	120	129,521	45	16,424	382		
203	111,456	783,431	117	377,971	152	220,377	43	—	2,738		
162	360,823	1,097,352	41	353,705	82	133,178	25	—	5,458		
176	105,638	640,536	53	63,859	96	100,458	15	6,172	1,005		
176	566,567	3,638,934	85	1,762,139	166	3,168,068	17	519	2,086		
128	175,156	543,196	119	396,591	132	362,522	57	267	926		
187	1,298,853	2,430,383	140	453,466	163	370,955	17	529	307		
139	1,022,480	1,495,238	21	438,700	80	162,349	8	8	4		
191	1,967,686	3,006,348	42	478,763	67	393,345	9	—	140		
319	2,424,191	2,999,801	249	1,376,088	290	1,165,799	71	10,464	2,812		
278	4,224,714	4,316,480	54	191,969	242	1,200,710	25	—	102		
193	10,237,498	7,869,170	93	285,220	155	594,991	22	16	415		
124	1,540,044	1,509,892	32	12,726	122	270,188	3	3	970		
59	209,713	242,593	49	99,957	83	381,659	21	—	2,991		
111	2,282,737	2,659,259	22	37,963	38	183,399	3	4,452	—		
159	1,637,311	2,969,740	21	29,635	147	647,214	17	4,352	371		
71	264,825	185,031	71	74,173	82	246,399	25	4,186	6,237		
146	1,617,856	2,178,962	40	169,660	104	725,996	2	—	245		
198	402,293	607,293	163	147,593	184	211,041	34	195	3		
147	364,858	845,224	105	354,375	135	204,968	13	—	6,916		
93	137,176	627,365	26	135,174	74	237,450	8	—	—		
79	29,844	261,430	22	144,452	32	46,600	7	—	1,562		
92	101,590	1,174,585	42	1,144,965	83	219,271	37	—	6,400		
33	42,038	798,659	14	26,672	18	22,050	3	—	—		
3,521	67,952,313	94,708,009	4,109	31,295,574	6,412	23,322,775	1,212	117,545	234,078		
7,893	63,592,869	84,345,528	2,972	31,049,074	5,970	24,622,304	1,203	115,385	163,883		

Comparison between Total Number of Associations and Number of Towns, Boroughs and Villages, and between Total Number of Members of Co-operative Associations and Number of Households.

Prefectorates	Number of associations at the end of December 1915	Number of towns, boroughs and villages at the end of December 1915	Number of associations per hundred towns, boroughs and villages	Total number of members of associations examined at the end of December 1914	Total number of households at the end of December 1914	Average number of households for one co-operator	Number of agriculturist members of associations examined at the end of December 1914	Total number of agriculturist households at the end of December 1914	Average number of agri-culturist households for one co-operator
Hokkaidô	183	341	53.7	7,478	340,014	45.5	4,187	169,857	40.6
Tôkyô	112	207	54.6	13,382	752,706	56.2	3,632	65,228	17.9
Kyôto	227	282	80.5	33,825	332,361	6.9	25,503	82,677	3.2
Ôsaka	114	299	38.1	14,908	494,951	33.2	8,684	94,853	10.9
Kanagawa	164	200	62	11,595	206,998	17.8	9,607	78,418	8.1
Hyogo	703	428	164.3	60,460	402,134	6.7	47,861	189,369	4
Nagasaki	126	200	63	17,759	179,670	10.1	11,470	111,749	9.7
Nûgata	421	418	100.7	56,743	304,623	5.4	45,000	198,055	4.4
Saitama	340	372	91.1	44,036	210,820	4.8	38,717	164,785	4.3
Gunma	478	208	229.8	44,642	155,958	3.5	42,007	108,678	2.6
Chiba	353	349	103.5	34,713	231,229	6.7	28,434	160,952	5.7
Ibaraki	365	381	95.8	21,310	216,975	10.2	18,072	169,013	9.4
Tochigi	192	176	109.1	17,466	152,254	8.7	14,390	97,292	6.8
Nara	126	155	81.3	8,266	97,906	11.8	7,272	62,671	8.6
Miye	325	340	95.5	35,368	198,910	5.6	29,278	119,588	4.1
Aichi	408	265	153.9	33,654	393,550	11.7	29,599	206,789	7
Shizuoka	243	341	71.3	29,557	241,642	8.2	24,440	158,745	6.5
Yamanashi	150	243	61.7	7,322	97,786	13.4	6,503	77,848	12
Shiga	118	203	58.1	33,633	132,848	3.9	25,575	93,775	3.7
Gifu	260	344	75.6	24,518	199,209	8.1	20,084	142,659	7.1
Nagano	500	394	126.9	35,737	258,354	7.4	31,667	202,027	6.4
Miyagi	209	204	102.5	12,047	147,572	12.2	9,940	88,166	8.9

Aomori	318	170	187.1	18,150	113,898	6.3	15,369	72,289	4.7
Yamagata	208	232	89.6	14,960	136,111	9.1	13,073	88,026	6.7
Akita	202	240	84.2	19,713	136,234	6.9	16,258	80,434	4.9
Fukui	214	179	119.6	13,480	114,720	8.5	12,141	74,551	6.1
Ishikawa	185	221	83.7	8,818	151,562	17.2	7,882	81,833	10.4
Toyania	270	272	99.3	19,594	136,682	7	16,567	80,431	4.9
Tottori	184	212	86.8	22,047	79,628	3.6	18,035	55,413	3
Shimane	250	288	86.8	48,596	148,878	3.1	37,774	113,740	3
Okayama	380	402	94.5	53,036	244,266	4.6	44,378	109,833	3.8
Hiroshima	385	432	89.1	59,294	327,048	5.5	52,381	204,231	3.8
Yamaguchi	224	225	99.6	65,377	214,732	3.3	48,769	131,996	2.7
Wakayama	188	232	81	15,381	140,906	9.2	11,944	78,241	6.6
Tokushima	105	140	75	7,547	128,835	17.1	5,720	81,720	14.2
Kagawa	144	179	80.4	30,844	136,118	4.4	24,759	90,781	3.7
Ehime	197	298	66.1	28,266	198,241	7	22,561	135,947	6
Kochi	135	198	68.2	16,920	124,028	11.4	9,462	81,534	8.6
Fukuoka	232	345	67.2	24,854	323,730	13	19,611	156,098	8
Oita	235	258	91.1	16,474	154,115	9.4	14,629	177,224	8.7
Saga	175	135	129.6	12,913	110,039	8.5	10,803	69,816	6.5
Kumamoto	128	365	34.8	11,517	198,044	17.1	10,302	143,650	13.9
Miyazaki	147	100	147	5,963	97,367	16.3	5,309	72,210	14.3
Kagoshima	175	139	125.2	40,843	217,504	5.3	37,049	192,499	5.1
Okinawa	46	55	83.6	13,189	101,584	7.5	13,259	82,984	6.3
Total	11,509	12,329	93.3	1,204,232	9,687,665	8	990,321	5,527,973	5.6
Preceding year	11,160	12,342	90.4	1,090,475	9,601,845	8.8	897,114	5,523,035	6.2

Notes. — (1) The total number of members of co-operative societies and that of agriculturist co-operators have been calculated without taking into account any but the examined associations. — (2) The number of households has been established on the basis of enquiries carried out by agricultural societies and of official statistics. For the prefecture of Okinawa however the industrial statistics drawn up by the prefectorate have been taken as basis. — (3) To calculate the total number of co-operators the average number of members of one association, as indicated in table II, was provisionally taken as basis.

MISCELLANEOUS INFORMATION RELATING TO CO-OPERATION AND ASSOCIATION IN VARIOUS COUNTRIES.

BRITISH INDIA.

THE MADURA-RAMNAD CENTRAL CO-OPERATIVE BANK, LIMITED. — *The Madras Bulletin of Co-operation*, Vol. IX, No. 2, Royapettah (Madras), August 1917.

This central co-operative bank of Madras has made certain rules as to its issue of loans.

Classification of Societies. — The societies affiliated to the banks are divided into three classes. Class I consists of those which are in the opinion of the bank's board well managed ; class II of those which are able to manage their own affairs but are not well managed in the board's opinion ; and class III of all the others. At the beginning of each business year a list of societies assigned to classes I and II. will be submitted to the board for approval by the secretary.

Classification of Loans. — Loans are divided into the three categories of " cash credit loans ", " short term cash credit loans ", and " short-term and long-term loans ". The secretary is authorized to advance sums in cash credit and on short-term cash credit accounts on the application to the bank of the societies privileged to draw upon it. Short-term and long-term loans may be made only with the board's sanction, and the previous recommendation of the Assistant Registrar must in some cases be obtained for them.

Cash Credit Loans. — These loans will be granted only to societies belonging to class I. Their maximum limit will be fixed proportionately to a society's normal needs in a year, as these are disclosed by the annual returns. The loans may not be made for more than a year but are renewable.

Societies applying for cash credit loans must submit on or before certain fixed dates : 1) a statement in abstract of their monthly receipts and disbursements ; 2) a statement as to the property of their members if they have unlimited and as to their share capital if they have limited liability ; 3) their annual balance-sheet and profit and loss statement ; 4) a statement as to their overdue loans and interest for the half year ; 5) a statement as to deposits and other borrowings for the half year.

The qualified societies may draw from the Central Bank any sum they need according to the prescribed form, provided the total indebtedness to the bank do not at any time exceed the maximum limit of cash credit. Interest shall be calculated at the usual rate of $7\frac{1}{2}$ per cent. on daily balances,

a fraction of ten rupees being treated as ten full rupees, and shall be added to the principal at the end of each half year. Societies must execute a pro-note for the maximum amount fixed in the order sanctioning cash credit.

Short-Term Cash Credit. — Credit of this description may be allowed to societies in classes II and III.

Societies may draw from the Central Bank loans to be used exclusively for making short-term loans to their members. A society must fix the maximum amount it will need for making such loans at its annual meeting, held before 15 August. Any sum thus needed may be drawn, in the form prescribed, from the Central Bank — the purpose for which it is drawn, the date of repayment and the security offered being stated — provided the total amount outstanding do not exceed the limit fixed at the annual meeting. All sums so borrowed shall be repayable with interest before the 31st of May next after the date of the loan.

In order to qualify to receive short-term cash credit, societies must submit to the Central Bank, before certain fixed dates, a statement in abstract as to monthly receipts and disbursements, a statement as to the property of members, and an annual balance-sheet and profit and loss statement.

They must execute a pro-note for the maximum amount of short-term cash credit fixed at the annual meeting. In calculating interest a fraction of ten rupees is treated as ten full rupees.

Long and Short-Term Loans. — Loans of this description may be made with the sanction of the board after full information has been obtained from the bank supervisors as to the working of societies applying for them and the needs of the members of these. A society is not entitled to such a loan until it has supplied all the particulars required in the form of application. The board of management will fix the dates of repayment, no loan being made however for more than ten years. Interest and instalments of principal are payable annually, within the quarter between 1 April and 30 June. Statements as to the property of the members of the applying societies must be submitted annually before 30 December, this being an indispensable condition of obtaining a loan.

UNITED STATES.

1. CO-OPERATIVE BULL ASSOCIATIONS. — WINKLER (Joel G.) in *Yearbook of the Department of Agriculture* 1916, Washington, Government Printing Office, 1917.

Co-operative Bull Associations are formed by farmers for the joint ownership, use and exchange of good, purely bred bulls. They also may encourage the careful selection of cows and calves, introduce better methods of feeding, help their members to market dairy stock and dairy products, intelligently fight contagious diseases of cattle, and otherwise help to raise the level of the dairy industry.

The first Co-operative Bull Association in the United States of which record exists was organized in 1908 by the Michigan Agricultural College. On 1 July 1916 thirty-two of these associations were active in the country, and they had a total membership of 650 and owned about 120 purely bred bulls. The following table shows their growth.

State	1908	1909	1910	1911	1912	1913	1914	1915 (1)	1916
Michigan	1	4	7	6	10	15	15	14	14
Minnesota	—	1	1	1	1	2	2	2	3
North Dakota	—	—	—	—	1	2	1	1	1
Maryland	—	—	—	—	1	1	1	1	1
Vermont	—	—	—	—	—	—	1	1	1
Wisconsin	—	—	—	—	—	—	1	1	1
Connecticut	—	—	—	—	—	—	—	1	1
Maine	—	—	—	—	—	—	—	1	1
Oregon	—	—	—	—	—	—	—	—	1
Oklahoma	—	—	—	—	—	—	—	—	1
Iowa	—	—	—	—	—	—	—	—	1
South Carolina	—	—	—	—	—	—	—	—	3
Massachusetts	—	—	—	—	—	—	—	—	1
North Carolina	—	—	—	—	—	—	—	—	1
Illinois	—	—	—	—	—	—	—	—	1
Total	1	5	8	7	13	20	21	22	32

(1) The 22 associations existing in 1915 had 540 members and owned 3,600 cows and 90 bulls.

Co-operative Bull Associations are especially useful to small herds which cannot afford singly to lay out on a valuable bull the percentage of their capital which his price would represent. The typical association of the United States is composed of from fifteen to thirty farmers who jointly own five "breeding blocks" and assign one bull to each block. As many as fifty or sixty cows may belong to the farmers in the block and the bull thereof should be kept on a conveniently situated farm. The blocks are numbered, and to prevent inbreeding each bull is moved from one to the next block every two years. If all the bulls live and all are kept until each has made a complete circuit, no new bulls need be bought for ten years. Thus each member, by paying only a small part of the purchase-price of one bull, has the use of good purely bred bulls for many years. Ordinarily the purchase-price and the expense of supporting the bulls are distributed

among the members of the association according to the number of cows owned by each.

The Department of Agriculture made a study of eight districts in the States of Iowa, Minnesota and Massachusetts in which there were no associations, obtaining information as to 1,219 farmers owning 817 bulls of the average value of \$76 each. Had these farmers been organized in associations they could nearly have divided the number of the bulls necessary to them by four, and therefore by the same initial outlay they could have secured bulls four times as valuable as those they had, and could have fed them at a quarter the actual expenditure on feeding. This fact is well illustrated by data obtained from one of the first associations to be organized under the direction of the Department of Agriculture. Before it was formed the average value of its members' bulls was \$55 each, but the average price which it paid for each of its registered bulls was \$240.

One hundred and fifty farms in Maryland, Michigan and Minnesota, which were questioned as to the value of Co-operative Bull Associations, estimated that the use of sires belonging to one of these organizations increased the value of the offspring in the first generation by from 30 to 88 per cent. — on an average by 65 per cent.

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2. THE ESSENTIALS OF SUCCESSFUL CO-OPERATIVE FRUIT AND VEGETABLE CANNERIES. — KERR (W. H.); "Business Essentials for Co-operative Fruit and Vegetable Canners", in *Yearbook of the United States Department of Agriculture*, 1916. Washington, Government Printing Office, 1917.

Growers of fruit and vegetables in many parts of the United States have thought to become rich by disposing in a co-operative cannery of such of their surplus products as could not be marketed in a fresh state. Such hopes have been largely unrealized. On some \$158,000,000 worth of canned and dried fruit and vegetables marketed in 1914 the growers sold only \$3,500,000 worth.

Practically all the co-operative canneries in the United States are found in the Pacific North West and California. These canneries have individual turnovers ranging from \$50,000 to \$1,500,000. Together with the Oregon Agricultural College, the Office of Markets and Rural Organization made a survey of the canning industry of the Pacific North West; and it also investigated co-operative canning plants in California and other parts of the United States. These studies enabled the essentials of success and the reasons for failure in this industry and this country to be ascertained.

It should be borne in mind that a canning business should not exist for by-products, that if built up primarily to get rid of lower-grade fruit and vegetables it is not likely to be successful. Many canneries have failed because they were organized only to utilize that portion of a fruit or vegetable crop which could not be marketed in its fresh state because of its deteriorated condition or bad quality.

The most successful co-operative canneries now at work handle a wide variety of produce through a long season, some beginning with strawberries in May and ending in December with late vegetables. By making use of the various crops as they ripen the busy season may be made to last about six and a half months.

The cannery should be situated as near as possible to the centre for the production of its material. The quantity of produce delivered to it as material should moreover allow it to transact such a volume of business that the overhead expenses will represent a small unit of cost per case. Canneries should generally be near a centre of population from which they can secure at a reasonable price the necessary pickers and other supplementary help. In many farmers' co-operative canneries the skilled labour used in the manufacturing department is supplied by the sons and daughters of the farmer co-operators. These young people earn pocket money and the cannery secures reliable and skilled help, year by year. In some districts the berry-picking season is looked upon as a holiday time, and many families in the Pacific North West and in California look forward to it.

From the neighbouring towns they — especially the women and children — move into the berry fields and spend from two to six weeks as pickers. They are fairly well paid and have an excellent outing. One cannery employs as many as 15,000 pickers in a season and provides good accommodation for camping.

The sanitary condition of a cannery should be satisfactory. There should be a plentiful supply of good water. The roads should be sufficiently good and there should be suitable provision for transport.

Proximity to markets is important.

Managers of several co-operative canneries state that a lack of sufficient capital is their chief handicap. Canning is a manufacturing business and therefore needs a much larger capital than the average co-operative enterprise. To be successful the association should have enough paid-in capital to make the plant and equipment practically free of debt when the first canning season opens. A considerable sum is needed for operating expenses before the final returns for canned goods are received, this last event often taking place eighteen months or more after the raw material is delivered. A liberal fund is therefore necessary for the making of advances to growers when they deliver their produce. Such advances range from 35 to 65 per cent. of the estimated value of the produce. If the plant be free of debt, enough money can usually be obtained from banks to finance the business of the early season, and in the later season additional money can be raised on warehouse receipts of the canned goods. Some of the larger canneries have as much as \$200,000 worth of canned goods in their warehouses at one time, and need a proportionately large surplus fund and good credit to finance their business during the canning season. Such credit was possessed by a Western farmers' cannery which recently bought a trainload of sugar for its year's business, having secured for such purpose a loan of \$85,000 from one bank.

Membership of a co-operative cannery should not be acquired for less

than \$25. A grower who has enough produce to interest him in the cannery ought to be willing to invest at least \$100 on acquiring membership or to take stock up to that amount.

The advice of someone well qualified to judge of buildings and equipment should be secured when the purchase of these is being considered; and a cannery should not be constructed except on plans made by experienced engineers or cannery men.

The manager should be familiar with manufacturing processes and with organization, should have a knowledge of accounts and should be an efficient salesman. In the larger canneries he should have as assistant a manufacturer, who should have had practical experience in the particular kind of canning for which he is engaged.

A regular supply of the right kinds of produce is necessary if a cannery is to do sufficient business. Therefore contracts for supplies should be, if possible, for a number of years. Wherever the size of the business justifies the expense a cannery should employ a "field man" to work among the farmer co-operators, helping them to solve their difficulties, hearing their complaints, explaining the principles and advantages of association.

Some canneries which handle large quantities of berries have a department for sending fresh fruit to distant markets. When the market for fresh fruit is profitable all fruit of suitable quality is sent away — the ripe fruit goes to neighbouring markets and fruit ready for immediate use to the cannery. When markets are not favourable all the fruit is canned and held until it can be sold at fair prices. One co-operative canning association has sent as many as twenty-one refrigerator-carloads of fresh red raspberries in one express train, while it was operating two large canneries. Several co-operative canneries in the Pacific North West also operate evaporators in which plums, loganberries, apples and some raspberries are dried. Other canneries have vinegar plants.

It is necessary that the manager keep in close touch with markets and know of their demands and conditions of trade preferences and of any improvements made in the canning business, in order that he may market products to the best possible advantage. A large portion of a season's output is sold for future delivery, and therefore great care must be taken in estimating output in order to prevent an oversale.

It may happen that cars are sold as early as April for delivery in September or October.

In one State a large number of the co-operative canneries have formed an association and appointed a joint agent, who is a canned goods broker, to handle their output. There is much need for greater co-operation among farmers' canneries for the purpose of standardizing output and forming a central agency for sales, in so far as the law allows.

Part II: Insurance and Thrift

ITALY.

COMPULSORY INSURANCE AGAINST THE ACCIDENTS OF AGRICULTURAL LABOUR.

OFFICIAL SOURCES:

BILL INTRODUCED BY THE MINISTER OF INDUSTRY, COMMERCE AND LABOUR AT THE SITTING OF 26 MARCH 1917: COMPULSORY INSURANCE AGAINST THE ACCIDENTS OF AGRICULTURAL LABOUR. Senate of the Kingdom. Doc. No. 360.

REPORT OF THE CENTRAL OFFICE OF THE SENATE ON THIS BILL. Dec. No. 360. A LIEUTENANCY DECREE-LAW, 23 August 1917, No. 1450, as to Provision for Compulsory Insurance against the Accidents of Agricultural Labour. *Gazzetta Ufficiale del Regno d'Italia*. Rome, No. 218, 14 September 1917.

L'ASSICURAZIONE OBBLIGATORIA CONTRO GLI INFORTUNI SUL LAVORO AGRICOLO (*Compulsory Insurance against the Accidents of Agricultural Labour*). *Annali del Credito e della Previdenza (Annals of Credit and Thrift)*, Series II, Vol. 18, Ministero per l'Industria, il Commercio e il Lavoro (*Ministry of Industry, Commerce and Labour*), Direzione Generale del Credito e della Previdenza (*General Direction of Credit and Thrift*). Rome, 1916.

Last July the Senate examined and approved the bill (No. 360) introduced by Signor de Nava, Ministry of Industry, Commerce and Labour, at the sitting of 26 March 1917, for compulsory insurance against the accidents of agricultural labour; and the government, in response to numerous desires expressed on all sides, has interpreted the feeling of the country and promoted the immediated publication, by means of a decree-law, of the provisions voted by the Senate.

The important reform, thus sanctioned by the lieutenant decree of 23 August 1917, 1450, fills one of the chief gaps in Italian social legislation, placing agricultural labourers, where the provision for insurance against accidents attendant on employment is concerned, on the same footing as industrial workers who are cared for by the law (single text) of 31 January 1904, No. 51.

The idea informing the present measure is that of guaranteeing indemnification to victims of accidents as surely as possibly and at the least possible cost to landowners. Pending the enactment of rules for its execution, for the compilation of which arrangements have been made and which we will notice in due time, we will give the chief provisions of the decree.

§ I. THE LAW NOW IN FORCE
AS TO ACCIDENTS ATTENDANT ON EMPLOYMENT.

The problem of insurance against the accidents of agricultural labour had, as has been said, already been faced and partly solved by the law we have mentioned of 31 January 1904, No. 51, as to the accidents of industry, which law constituted the first step taken in this sphere. Its application is indeed limited to such agricultural labour as, by reason of its nature, or its nature together with the fact that it requires the employment of more than five workmen, or the circumstance that machinery is used to perform it, involves serious danger. On this principle the law imposes the obligation of insuring agricultural labourers in the following circumstances :

a) if more than five of them are employed on works of hydraulics, on works involved by the systematization of avalanches and mountain-basins, on woodcutting and clearing and the transport of timber to depositories on the banks of rivers and torrents or beside cart roads, and on floating timber from these depositories on rivers and torrents (art. 1, no. 2) ;

b) if more than five of them are employed on the industrial work of olive-presses, cellars, vintners' establishments and similar labour, in which machinery not directly set in motion by the workman using it is employed (art. 1, no. 3) ;

c) if any number of them work on machines worked by mechanical power or the motors of these, such machines having an agricultural use (art. 1, no 4) ;

d) if they work for the anti-hail guns or other anti-hail apparatus (art. 1, no. 5).

It is seen therefore that the majority of agricultural labourers have hitherto remained outside the law's guardianship. The fact that the use of agricultural machinery is still comparatively limited, and the circumstance that in the open-air work, which is that usually necessitated by agriculture, the use of machinery not moved by mechanical power does not, by the terms of the law, imply the compulsion to insure, have had the consequence that while labourers employed on agriculture are much more numerous than those employed on industry, far fewer of the former than of the latter come within the law's sphere, so that " in regard to the mass of workpeople to be safeguarded, the extension of the compulsion to insure to work executed without using machinery is more imperative in the case of agriculture than in that of manufacturing industry ".

We should add that the theory, so often given out, that not only is agriculture less dangerous than industry, but that the number of agricultural is so inferior to the number of industrial accidents that to provide insurance against the former is not a matter of urgency, is recognized today to be unfounded. Apart from the continuous increase of machinery on farms, which noticeably increases the number of accidents, many accidents are met with which are due to the specific risks of agriculture. The govern-

ment has therefore thought it opportune to hasten the adoption of provisions which have been the object of long study and respond to "an urgent need of justice" on the part of a numerous class of labourers who make a preponderant contribution to the wealth of the nation (1).

§ 2. THE LIMITS WITHIN WHICH THE DECREE
OF 23 AUGUST 1917 WAS APPLIED AND THE SYSTEM OF INSURANCE.

On the basis of this decree the following persons between the ages of nine and seventy-five are fully insured against the accidents of agriculture:

a) permanent or casual labourers, men or women, employed on farms and in woods;

b) landowners, *métayers* and lessees, and their wives and children, legitimate and other, who habitually practise manual labour on their respective holdings.

c) overseers of farms and forests who receive an average daily wage, comprising payments in kind, of no more than 10 liras, the year being taken to have 300 working days.

For the categories of those employed as above on agriculture and forestry who are contemplated by the law of 31 January 1904, no. 51, the provisions of this law remain in force.

The cultivation of land and woods and the works connected therewith and complementary or accessory thereto, such as the care of plants, irrigation, the care, breeding and management of animals, and the preparation, preservation, conversion and transport of agricultural, animal and forest products, constitute the work of farms and woods.

Thus the insurance applies to cultivation of the land in every form, and the works connected with and accessory to cultivation, independently of the extension of farms and woods and the greater or less gravity of the risks of accidents to which labourers on farms and woods are subject, and independently of relations created by contracts between landowners and labourers.

The insurance covers all cases of accidents by violent means in the course of labour, giving rise to: 1) death; 2) permanent total disability; 3) permanent partial disability reducing working power by more than 15 per cent.; 4) total temporary disability necessitating abstinence from work for more than ten days. Indemnities of this last kind will be payable from the eleventh day of such period of abstinence to the end thereof, up to a maximum limit of ninety days.

(1) The problem of insurance against the accidents of agriculture has been in Italy the object of many projected laws, initiated by ministers or parliament, which we examined in our issues for February 1911 and January and June 1916.

To the indemnity fixed for the case of a death or of permanent total disability there is added one tenth of its amount for a wife and for every child under fifteen, up to 50 per cent of its amount.

Indemnities are paid as capital, but are paid to the *Cassa Nazionale di Previdenza* to be converted into a life annuity if they bring such an one up to the sum of 300 liras a year or more.

The introduction of fixed indemnities overcomes the difficulty due to the fact that true and rightful wages are not always paid in the industries of agriculture and forestry. Fixed indemnities presume uniform average wages throughout the kingdom, and the presumption is admissible because agricultural wages in the various districts do not show the same disparity as the wages of the manufactory industry. The table we have reproduced shows that indemnities have been fixed very appropriately, the different elements being taken into account. Besides the distinction for sex the distinction for the ages at which accidents occur is important. Above all the fact should be noticed that the families of victims do not suffer, indemnities being increased when the economic consequences of accidents fall on labourers having young children.

The expenses of insurance are paid on a system we will presently explain, and are borne entirely by the owner, lessee or usufructory of the land.

When land is held on lease, or on a profit sharing or *métayage* system, the expenses fall on the owner, lessee or usufructory, if the occupier, *métayer* or cultivator habitually cultivates the farm by his own manual labour. Otherwise the owner, lessee or usufructory may require from the occupier the whole amount of the insurance contribution, and from the *métayer* or cultivator rendering partial profits a quota of such contribution proportionate to the share of the profits of the farm assigned by their contract to this *métayer* or cultivator. Anyone who by direct or indirect retention of wages causes a labourer to sustain the expenses of insurance is punished by a fine up to the limit of 4000 liras.

The management of insurance against the accidents of agricultural labour is temporarily entrusted, until new provision shall be made, to the *Cassa Nazionale di Assicurazione per gli Infortuni degli Operai sul Lavoro* (National Fund of Insurance for the Accidents of Workpeople during Labour) (1). Mutual societies, the funds of consortia and other bodies, which before 26 March 1917 exclusively or mainly insured against the accidents of agriculture, can be recognized by royal decree and allowed to continue

(1) This was founded by the law of 8 July 1883, no. 1473, and is a public institution, the official organization for insurance against the accidents of labour, placed beneath the superintendence of the Ministry of Industry, Commerce and Labour. It is authorized to undertake various kinds of business — collective insurance on the terms of the law of 31 January 1904, no. 51; insurance against civil liability to workmen; voluntary insurance of industrial workers; reinsurance of mutual insurance societies, etc. It is the only institution in Italy which is enabled by a vast ready-made organization, a numerous administrative and technical staff which has experience in this matter, and its own wide experience of the accidents of agriculture, to

their activity temporarily, within the limits and on the conditions established by the regulation, which may oblige all the farms and woods within the spheres of these institutions to belong to them. Moreover a royal decree, promoted by the Ministry of Industry, Commerce and Labour in concert with the Ministry of Agriculture, after hearing on the subject the Technical Committee of Agriculture and the Council of the State, may declare compulsory the constitution of mutual funds among enterprises within determined agricultural and woodland zones, when particular local conditions or other circumstances make this necessary or advisable.

The territory of the kingdom will be divided into insurance areas, each of which will be fixed by royal decree and comprise one or more funds. The *Cassa Nazionale* will manage each area separately.

The needs of each year of business will be supplied by a contribution which will constitute an additional quota of the Treasury tax on rural lands.

Such contributions will be determined for each insurance area in accordance with the extent of its land, the nature of its crops, the labour it needs, and the risks of accidents, by means of tariffs in which the limit of 1.75 liras per hectare will not be exceeded, and which will be established by a commission constituted in each area, and approved by a decree of the Ministry of Industry, Commerce and Labour in concert with the Ministry of Agriculture, the Council of Thrift and Social Insurance having been heard on the subject. For determined insurance areas, or single parts of each area, or farms and forestry enterprises of limited extent, these contributions may be commensurate with the land tax on rural lands due to the Treasury.

The regulation will establish what part of annual contributions should be assigned to the constitution of a reserve fund and how such fund should be invested. The sums carried over from each year will go to increase it until it be equal to the sum needed for each year's business, when the insurance contribution will be reduced to the limit necessary each year.

§ 3. LIQUIDATION AND PAYMENT OF INDEMNITIES.

Indemnities for temporary disability will be paid by the offices of each insuring institution according to the rules which will be made by these institutions and approved by the Ministry of Industry, Commerce and Labour. The other indemnities will however be paid according to the rules established by the regulation, by *ad hoc* committees in each insurance area and

assume in the shortest possible time the management of the form of insurance with which we are dealing, and such management was temporarily entrusted to it by the decree-law. Logically such temporary management should become permanent, as was observed by the central office of the Senate when a judgement was given on the excellence of this fund's methods as compared with those of other authorized bodies, all of them being obliged to present to parliament a complete report of the results they have obtained, no later than five years after the decree came into force.

at the offices of the insuring institutions. Each such committee is composed of a president nominated by the insuring institution, a representative of the farms and forestry enterprises and a representative of the labourers, the former representative being chosen from a list proposed by the organizations of agricultural employers, the latter from one proposed by the organizations of agricultural labourers. Where there are no such organizations or where, in the judgement of the Ministries of Industry, Commerce and Labour and of Agriculture, they do not sufficiently represent the two classes to designate representatives, the choice of the latter will be made by these ministries, after they have heard on the subject the delegates of the agricultural organizations of employers and labourers represented in the Higher Council of Labour.

All controversies as to a right to indemnity and as to payment thereof, including those on the indemnity itself, will be settled by the *Commissioni compartimentali arbitrali* (Arbitrating Area Commissions), which will be instituted at the headquarters of every insurance area near the tribunal if there be one, otherwise near the praetorate. By royal decree there may also be constituted more than one arbitrating commissions for the same insuring area if it comprise more than one province or if special local conditions or other circumstances create a recognized necessity for them.

Each commission is composed of five members : a) a tribunal judge, annually chosen by the first president of the Court of Appeal, who is chairman ; but where the headquarters of the insurance area or other town in which a tribunal is situated is not the seat of a tribunal, the praetor of the district in which it is situated presides over the tribunal ; b) two health officers not receiving pay from the insuring institutions ; c) a representative of persons subject to the obligation to insure and a representative of the insured persons.

The decisions of these arbitrating commissions are liable to revision, where the disputes are more important before a Central Commission instituted in Rome at the Ministry of Industry, Commerce and Labour, and composed of a councillor of appeal, a president, two superior officials belonging, respectively, to the Ministry of Industry, Commerce and Labour and the Ministry of Agriculture, two health officers having special scientific and professional aptitudes for business concerned with the accidents of labour and not paid by the insuring institutions, a representative of the persons subject to the obligation to insure and a representative of the insured persons. There is no appeal from the decisions of this commission.

Professional advocates are not heard by the Arbitrating Area Commissions and the Central Commission. The protection of those interested may be entrusted only to the institutions of patronage and assistance which exist for the benefit of labourers who are victims of accidents and their representatives, and which have been approved by the Ministry of Industry, Commerce and Labour. Engagements entered into by those having a right to indemnities with intermediaries, who are paid to take an interest in the liquidation or payment of indemnities, are declared null and void, engagements entered into with the aforesaid institutions being excepted. It is also

provided that the measures to exact the indemnities cannot be relaxed except in the cases and according to the rules established in the regulation, and that every engagement made to escape payment of indemnities or lessen their amount is null.

The decree-law with which we are concerned regulates another delicate matter, namely the indemnified person's right to revision of an indemnity;

This right is mainly limited by the law in force as to the accidents of industry, but it is better regulated for it takes into account the inconveniences to which this law has given rise. It has been found that workpeople, so soon as an indemnity has been liquidated, frequently ask for its revision, stating that their physical condition has become worse since their claim was first considered. Not a few of them repeat this demand several times in the course of the two years fixed by the law, knowing well that the insuring institution, rather than face the expenses of revision, often ends by granting the indemnity asked for. It is therefore provided that a demand for revision, owing to alleged error in the first liquidation, can be admitted only when this liquidation has taken place, and that it can only be admitted once. In the case of a revision owing to a modification in the physical condition of the workman it is established that a demand for this cannot be made until a year after the liquidation of the indemnity, for a certain period of time is necessary in order that such a modification may show itself and translate itself into an effective and permanent reduction of working capacity, and in order to exclude or at least to render more difficult the eventuality of further deterioration which would require successive revisions. In any case the application for a revision must be made within two years of the day of the accident, according to the ruling of the law in force as to accidents to workmen during employment.

§ 4. THE COST OF THE INSURANCE.

One of the most interesting investigations is that into the cost of insurance, the exact determination of which has been a matter of no little difficulty. It depends principally, when once the frequency of accidents has been noted, on the number of persons in favour of whom the insurance is instituted and the amount of the indemnity. According to the anticipatory calculations made, the insurance will extend to nine million persons between the ages of nine and seventy-five. If those persons be also taken into account who are not indemnified in cases of accidents because their age is not within the stated limits, but who indirectly enjoy the benefits of insurance in that they belong to agricultural families, it will be found that the insurance will be to the indirect or direct benefit of a third part of the population.

The cost, for so great a number of persons affected, will be somewhere round 13,000,000 liras, a modest sum in relation not only to the mass of the population benefited but also to the other elements which go to make

up the cost of agricultural and forest production. If this sum be compared with the tax on lands due to the Treasury and the local, provincial and communal administrations, it will be found to represent less than 5 per cent. thereof. On the supposition that labourers on farms and in woods in all districts are wage-earners it represents less than 1 per cent. of wages. On the supposition that the gross agricultural and forest production of all Italy is worth 6,500 million liras, only 2 per thousand of this sum is represented by the thirteen million liras for insurance against accidents, and only 8 per thousand of the average revenue from land which is estimated as equal to a fourth part of the aforesaid gross production.

It should also be remembered that this estimate of the cost of insurance represents an average and is susceptible to reduction in particular agricultural and forest zones. The frequency of accidents in relation to area does indeed vary with the nature of a holding and the kind of crops grown on it, and the tariff of contributions therefore shows only comparatively low premiums for zones agriculturally poor in which, in general, extensive cultivation prevails. For another reason it is permissible to anticipate that the burden will not disturb the equilibrium of the agricultural industry. It appears that in the five years from 1901 to 1905 agriculture was able to support increases in annual wages varying from 30 to 40 per cent. In face of such figures the new burden imposed by insurance against accidents, equal to 1 per cent. of wages, certainly does not seem onerous.

MISCELLANEOUS INFORMATION RELATING TO INSURANCE AND THRIFT IN VARIOUS COUNTRIES.

CANADA.

MODIFICATION OF THE LEGISLATION AS TO INSURANCE AGAINST HAIL. -- *Canadian Finance*, Vol. VIII, No. 19; Winnipeg, 3 October 1917.

In order to remove certain features of the Insurance Act of 1910 which were declared *ultra vires* of the Parliament of Canada by a judgement of the Privy Council last year, and in order to make other changes deemed to be necessary and opportune, the entire Insurance Act has been re-enacted with amendments. The title of the new law, which received the royal assent on 20 September, is "An Act respecting Insurance".

Among all its provisions we will notice only that which concerns insurance against hail. Every Canadian company insuring against hail is required to accumulate a hail insurance surplus fund equal to 50 per cent. of the premiums of the year by setting aside its profits from such business. British and foreign companies undertaking business of this kind must maintain assets in Canada in excess of the amount required in respect of their other business by at least 50 per cent of the total net premiums on their hail business in Canada.

GERMANY.

1. THE RESULTS OBTAINED BY THE MOST IMPORTANT MUTUAL SOCIETIES FOR INSURING LIVE STOCK IN 1916. — *Wallmanns Versicherungs-Zeitschrift*, 51st year, Vol. II, No. 93, Berlin-Lankwitz, 30 August 1917.

Apart from the *Perleberger*, which, has transformed itself into a stock company, the insurance of live stock is practised in Germany by mutual institutions. The figures with respect to them which we will give concern the twenty-five most important of their number, and among these the *Schlachtviehversicherung* (Insurance of Cattle for Slaughter) of Berlin and the two provincial institutions of Bavaria with the *Rheinische Pferde- und Viehversicherung* (Rhinish Horse and Cattle Insurance) come nearest to the *Perleberger*. If the Berlin *Schlachtviehversicherung*, two fifths of whose insurance is of butchers' live stock, be left on one side, we find that in 1916 the total insurance of these institutions was only 1,200,815,636 marks. If it be admitted that Germany's total live stock should be estimated at 25,000,000 heads, the amount of insurance still to be accomplished in this sphere becomes clear. It is true that side by side with these large so-

cieties there are thousands of small local societies, but the latter have too little importance.

The twenty-five societies covered by our figures received premiums, including dues, amounting to 20,612,992 marks, from which sum 1,998,770 marks of reinsurance must be subtracted. The net total was therefore 18,614,222 marks.

In the following table receipts and expenditure are shown under their different heads in terms of thousands of marks, and the development of these insurance societies from 1911 to 1916 is thus made clear.

RECEIPTS.

	1911	1912	1913	1914	1915	1916
Premiums	18,663	18,633	18,754	18,653	17,494	20,613
Reinsurance	620	601	894	851	1,126	1,999
Mathematical reserves	194	127	82	86	174	842
Amount of premiums	17,860	17,815	17,788	17,888	16,542	17,772

EXPENDITURE

Indemnities	20,054	20,447	20,221	20,148	17,550	16,994
Sale of carcasses, etc.	5,224	5,487	5,691	5,493	4,468	4,123
Net amount of indemnities.	14,830	14,690	14,530	14,655	13,082	12,871
Costs and provisions	3,260	3,065	3,060	2,976	2,747	3,258
Balance	— 230	— 210	188	257	713	1,643
Interest	374	442	398	394	408	521
Difference of exchange.	— 17	— 75	— 68	— 31	— 58	— 93
Total balance . . .	127	157	518	620	1,063	2,071

Indemnities amounted to 16,994,115 marks. From this sum 4,122,917 marks must be subtracted as emanating from the sale of carcasses and remains, and the net sum of indemnities was, therefore 12,871,198 marks or 72.3 per cent. of net premiums. In the successive years from 1886 to 1916 the like percentage was: 68.6 — 70 — 74.1 — 72.1 — 71.1 — 78.6 — 71 — 76.8 — 72.6 — 71.4 — 73 — 71.4 — 70 — 73 — 74.4 — 76.5 — 79.7 — 78.6 — 79.6 — 82.4 — 79.8 — 80.7 — 82.5 — 83.4 — 83.5 — 83 — 83.9 — 82 — 82 — 79.1 — and 72.3.

Costs, taxes and commissions amounted to 3,257,460 marks or 18.3 per cent. of net premiums. Costs and indemnities absorbed the total amount of premiums to an extent which reduced profits to 1,643,306 marks. The latter sum was however considerable as compared with profits in previous years.

Year	Number of Societies	Insured sums outside the Schlachtviehver- sicherung of Berlin	Premiums and dues	Net amount of indemnities	Balance of amount of premiums
—	—	marks	marks	marks	marks
1883-1885	11	48,420,000	1,565,000	1,111,670	23,114
1886-1890	17	67,693,400	2,251,260	1,587,720	19,350
1891-1895	21	104,675,000	3,544,861	2,558,273	57,000
1896-1900	22	216,351,000	5,690,481	4,078,407	31,432
1901-1905	26	516,354,000	13,266,513	10,423,802	13,896
1906-1901	26	681,950,000	16,171,547	12,879,971	128,700
1911	26	817,257,000	17,860,650	14,829,790	229,968
1912	25	825,534,000	17,815,013	14,960,047	210,139
1913	25	833,533,000	17,791,359	14,530,465	182,723
1914	25	834,187,000	17,887,428	14,655,594	256,750
1915	25	799,567,054	16,542,313	13,681,971	712,897
1916	25	1,200,815,636	17,771,964	12,871,198	1,643,306

German societies insuring live stock	Premiums of each Society		Premiums and costs, profit of carcasses deducted		Mathe-ical reserves		Balance from interest and various marks		Mathe-ical reserves		Sums insured including insurance of butchers' stock marks		Difference as compared with 1915 marks	
	marks	marks	marks	marks	marks	marks	marks	marks	marks	marks	marks	marks	marks	marks
1. Altenburger, Altenburg	375,562		37,949	1,357	66,418	94,998	2,474	10,231	—	6,533	13,801,742	—	4,144,768	—
2. Allgemeine Deutsche Viehversicherung, Berlin	796,165		350,568	66,418	94,998	31,922	8,313	—	12,412	180,090	55,511,430	+	31,494,780	+
3. Central-Viehversicherung-Berlin	293,118		133,895	94,933	31,922	3,506	—	2,710	—	24,207	34,627,725	—	11,624,213	—
4. Veritas, Berlin	679,115		243,084	51,276	3,506	—	—	—	—	125,090	33,910,723	+	13,696,255	+
5. Braunschweig, Brunswick	810,143		229,650	41,501	3,946	—	—	—	1,980	84,413	13,185,150	+	509,481	+
6. Sächsische, Dresden	802,560		430,539	101,792	53,544	66,711	48,494	—	31,537	22,6948	22,215,639	+	6,234,403	+
7. Vaterländische, Dresden	402,644		139,373	46,596	66,711	95,386	34,427	—	2,317	193,075	10,115,448	+	3,001,397	+
8. Erfurter, Erfurt (1)	380,952		250,969	—	—	—	—	—	—	229,817	13,765,025	+	4,579,965	+
9. Halensia, Halle	740,758		270,868	55,867	131,763	—	9,261	—	—	131,272	107,910,478	+	72,799,677	+
10. Norddeutsche, Hamburg	130,648		88,172	4,485	—	—	—	—	—	8,109	3,321,850	+	50,480	+
11. Badische Pferde, Karlsruhe	733,132		398,123	62,741	123,629	33,427	—	7,418	—	328,376	17,399,391	+	415,471	+
12. Rheinische Pferde- und Viehversicherung, Cologne	1,733,847		1,110,064	237,149	122,195	23,102	—	20,985	—	464,516	66,671,753	+	27,288,955	+
13. Anhaltische, Cöthen	38,860		27,428	—	—	2,451	1,832	—	—	—	992,375	+	86,315	+
14. Bayerische Pferdeversicherung, Munich	1,963,520		1,745,842	—	—	203,448 (4)	96,133	—	—	—	76,010,400	+	12,283,640	+
15. Bayerische Rindviehversicherung, Munich (2)	1,542,650		1,311,950	—	—	201,010 (4)	150,791	—	—	—	164,887,357	+	61,971,434	+
16. Perlberger, Perlberg	2,408,817		1,633,426	85,803	141,609	33,077	—	—	—	153,841	475,342,061	+	171,885,3930	+
17. Viehversicherung zu Plan, Plan	180,856		131,517	81,17	—	13,888	—	3,027	—	12,571	3,736,115	—	3,238,219	—
18. Viehversicherung zu Schwerin, Schwerin	1,011,081		623,914	95,129	72,334	18,210	—	3,950	—	255,422	41,550,540	+	2,919,671	+
19. Pfälzische, Speyer	165,577		91,369	10,745	24,483	7,153	—	—	—	43,593	5,844,526	+	2,355,804	+
20. Stuttgarter Pferdeversicherung, Stuttgart	201,361		150,114	—	—	20,670	8,114	—	400	90,000	5,416,876	+	470,910	+
21. Trier'scher, Trier	155,687		86,073	—	—	55,578	5,238	—	—	—	8,096,260	+	838,234	+
22. Wetzener, Weizen	1,124,689		860,830	—	—	48,486	10,512	—	—	—	20,002,091	+	4,870,209	+
23. Prignitzer, Wittenberg	81,982		54,268	1,182	5,149	1,795	—	1,022	—	1,541	1,999,300	+	534,920	+
24. Zeitzer Versicherung, Zeitz	186,948		168,695	—	—	2,389	4,772	—	—	—	4,525,381	+	1,485,810	+
25. Schachtviehversicherung, Berlin (3)	16,449,672		10,908,716	842,258	1,512,583	511,655	—	92,719	—	2,559,440	1,200,815,636	+	398,808,901	+
	2,164,550		1,962,482	—	—	130,623	9,594	—	—	—	?	?	?	?

(1) 31 May 1916-1917. — (2) 1st November 1915-1916. — (3) Date in accordance with those for 1915. — (4) Interest on State subsidies: Bayerische Pferd-
versicherung, 100,000 marks; Bayerische Rindviehversicherung, 146,000 marks.

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2. THE DAMAGE CAUSED BY FLOODS. — *Wallmann's Versicherungs Zeitschrift*, 51st year
No. 92, Vol. II. Berlin-Lankwitz, 26 August 1917.

The following figures are taken from the last Statistics as to the damage caused by the increase of waters and by floods in Prussia. They apply to the period 1903 to 1913.

Year	Amount of damage	
1903	44,139,380	marks
1904	2,204,372	»
1905	8,692,380	»
1906	5,411,799	»
1907	23,892,076	»
1908	9,247,488	»
1909	20,956,285	»
1910	13,882,347	»
1911	4,460,229	»
1912	6,906,090	»
1913	12,280,271	»

The greater part of this damage should be ascribed to the value of the crops, as follows :

Year	Area affected	Amount of damage
—	hectares	marks
1903	372,688	36,072,910
1904	18,332	1,029,806
1905	125,327	7,144,146
1906	61,429	4,083,140
1907	246,387	22,439,105
1908	86,371	8,315,214
1909	132,635	8,972,169
1910	195,537	10,693,299
1911	59,166	3,299,219
1912	116,408	5,748,747
1913	168,190	8,280,191

It is very important to be able to localize the amount of damage caused according to the watercourses and basins. But facts of this kind have been collected only for a few years, whereas it is seven years since statistics were first established without taking them into account. The following data are those which exist for the years from 1910 to 1913.

	Amount of damage.			
	1910 marks	1911 marks	1912 marks	1913 marks
Memel	—	—	105,701	144,118
Pregel	—	—	1,330,365	761,534
Weichsel	156,644	109,800	533,308	1,321,985
Oder	5,252,791	2,745,214	1,392,363	3,153,367
Elbe	2,109,965	235,726	574,884	190,472
Oste	—	25,270	—	8,510
Weser	1,073,335	103,411	826,438	511,599
Ems	299,722	—	87,281	57,945
Vechte	79,703	—	47,700	14,435
Rhine	3,078,880	546,184	293,396	305,552
Meuse	55,685	4,203	385	3,970
Danube	67,540	—	4,040	—
Kurisches Haff	110,445	28,175	386,380	640,132
Frisches Haff	603,541	28,618	596,249	224,629
Ostsee	206,467	306,593	304,422	3,140,772
North Sea	446,640	402,465	305,245	94,835
Binnenseen	340,989	24,380	117,983	57,455
Wolkenbrüche	—	—	—	1,648,961

UNITED STATES.

MUTUAL INSURANCE AGAINST FIRE IN MASSACHUSETTS. — *Sixty-Second Annual Report of the Insurance Commissioner of the Commonwealth of Massachusetts, January 1, 1917 (Business of 1916), Public Document No. 9.*

From about 1895 until 1897 the organization of mutual fire insurance companies in Massachusetts proceeded with feverish rapidity, more than twenty new companies of the sort being incorporated and authorized to issue policies. But of these ill founded and ill administered companies not one has survived until the present day.

This unfortunate episode led to the passing of three statutes, still in force, each of which is intended to prevent certain abuses. By the first any person whose duty it is to determine the character of risks and decide whether applications for insurance be accepted or rejected by an insurance company is forbidden to receive as part of his remuneration a commission on the premiums. The second law imposes a penalty on any Massachusetts fire insurance company which establishes an agent or appoints any person to seek or to transact for it business in any State in which it has not been lawfully authorized to transact business, or any such company which allows a commission or emolument to any person for thus soliciting or procuring insurance. The aim is to prevent unwary or grasping underwriters from burdening the companies of Massachusetts with the poor risks of other States. The third law enacts that no policy shall be issued

by a newly incorporated fire insurance company until it has filed with the Insurance Department a list of those subscribing for its insurance and such other information as the Insurance Commissioner may require, and until its president and secretary have certified on oath that every subscription on the list so filed is genuine, and have agreed with every subscriber that he will take the policies for which he has subscribed within thirty days of the time at which the Insurance Commissioner grants to the company a license to issue policies. This law has practically put an end to false subscription lists.

These laws prevented certain abuses but did not prevent a second although less grave crisis which occurred about 1915 because new mutual fire insurance companies were incompetently managed. The new companies in question were able to show that their proceedings for incorporation had been legally carried out, and that each of them had secured, as the statute requires, more than 400 applications for insurance within the Commonwealth, covering more than \$1,000,000 of insurance, and had not accepted any application bringing the value they insured beyond 10 per cent. of their net assets as defined by statute.

It became necessary to forbid the issue of a license to transact business to a new company until it had adopted a proper system of accounting, engaged a competent accountant and a competent and experienced underwriter, and freed itself from any liability incurred on its behalf. In the case of a stock company the liability for capital stock was however excepted from the prohibition.

The following table shows the condition of twenty-four of the oldest mutual fire insurance companies in Massachusetts — some of them were founded sixty, eighty or even a hundred years ago — in 1894, that is to say before the first crisis, and on 31 December 1916.

Name of company	Date of foundation	1894		1916		Gain or Loss in insurance	Gain or Loss in surplus
		Insurance (net) in force	Surplus	Insurance (net) in force	Surplus		
		\$	\$	\$	\$	\$	\$
Abington	1857	8,272,505	19,294	11,623,160	124,258	3,350,655	104,964
Attleborough	1845	2,953,976	20,959	2,090,460	13,383	36,484	7,576
Berkshire	1835	8,750,550	53,122	22,782,178	102,629	14,031,628	49,597
Cambridge	1834	15,622,520	93,692	5,708,653	33,287	9,913,867	75,105
Citizens	1846	25,955,733	159,996	6,821,297	18,289	19,134,436	126,308
Dedham	1837	4,499,597	91,099	9,486,915	110,748	4,997,318	19,079
Dorchester	1855	30,218,280	115,451	19,999,774	58,405	10,218,506	56,956
Fitchburg	1847	24,775,588	2,555	19,786,605	40,982	4,988,923	38,427
Hampshire	1832	3,969,736	15,891	4,406,793	12,638	430,967	3,253
Hingham	1826	27,385,599	178,366	27,594,236	148,711	208,637	29,655
Holyoke	1843	39,336,085	564,640	46,475,182	500,841	7,139,097	63,799
Lowell	1832	5,185,377	71,306	14,090,607	71,624	8,995,230	318
Merchants and Farmers	1847	23,266,747	64,473	22,855,358	134,879	411,389	70,406
Merrimack	1828	29,175,873	56,131	36,764,322	66,307	7,588,449	10,176
Middlesex	1826	36,732,516	296,525	45,429,718	252,274	8,697,202	44,251
Mutual Fire	1827	4,820,923	120,492	6,271,500	251,761	1,459,577	131,269
Mutual Protection	1864	1,405,733	57,256	4,290,461	50,231	2,884,728	1,025
Newburyport	1829	696,835	25,789	820,435	45,051	123,600	10,262
Norfolk	1825	19,798,931	327,125	27,268,989	483,665	7,470,958	156,540
Quincy	1851	34,335,277	344,055	41,483,011	632,143	7,147,734	288,088
Salem	1838	2,205,710	43,243	1,552,347	14,985	653,363	28,258
South Danvers	1829	1,167,250	53,585	2,063,947	6,301	890,697	47,284
Traders and Mechanics	1848	39,609,416	368,353	36,419,407	147,140	3,190,009	221,213
Worcester	1855	39,010,914	388,258	38,927,600	667,116	83,314	278,85
		428,251,671	3,531,626	455,012,925	3,994,047	26,761,294	462,421

These figures show that in the twenty-two years considered these companies have gained in net insurance in force \$26,761,294 and in surplus \$462,421, and are thus more than holding their own with the new companies.

Some figures can be quoted to show the general position of insurance against fire in Massachusetts. The companies undertaking insurance of this kind received altogether premiums amounting to \$ 13,488,419 in 1907 — estimated dividends payable on the mutual companies' premiums being deducted — to \$ 20,036,210 in 1916, and to the aggregate sum of \$157,055,653 in the ten years from 1907 to 1916, inclusively. Indemnities paid in 1907 and 1916 amounted to \$ 7,729,583 and \$ 9,184,161 or 57.31 and 45.84 of premiums, respectively. The average percentage of premiums paid as indemnities in these ten years was 67.89, and was much raised by the large percentages paid in 1908 and 1914 — respectively 111.98 and 139.24 — in consequence of the importance and frequency of losses.

There were 264 companies which insured against fire in Massachusetts in 1916. They received altogether \$ 458,136,449 in net premiums and paid \$ 223,634,069 in net indemnities. They were distributed as follows :

1. Massachusetts mutual companies other than manufacturers' . . .	34
2. Massachusetts mutual marine insurance companies	1
3. Mutual companies of other States other than manufacturers' .	13
4. Massachusetts manufacturers' mutual companies	8
5. Manufacturers' mutual companies of other States . . . , . .	18
6. Massachusetts stock companies	4
7. Stock companies of other States	120
8. United States branches, companies of other countries	66

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Mutual companies belonging to the first group received in 1916 net premiums amounting to \$ 3,033,801 and paid \$ 1,052,130 in net losses. Their admitted assets amounted to \$9,257,806 and their liabilities to \$ 3,931,228. Companies of the third group received net premiums amounting to \$10,685,750 and paid \$4,151,848 in net indemnities. Their admitted assets amounted to \$ 27,348,850 and their liabilities to \$ 16,457,495. The surplus of the first group amounted only to \$ 5,320,389, that of the third group to \$10,891,355.

The total number of fires in Massachusetts in 1916 was 7,101, and 1,855 of them occurred in the town of Boston. The total sum paid in indemnities in the whole State was \$ 8,188,149.53, in Boston \$ 2,250,587.26. There are no data to show the losses sustained by agricultural property in the year nor the share of agricultural insurance undertaken by the mutual companies of this State. It has been established however that outside Boston 250 fires occurred in barns and stables of which the estimated value as buildings was \$ 692,687 and the insured value \$ 441,397 : the loss was

valued at \$ 334,040 and \$ 227,468 was paid in indemnities. The contents of these buildings were estimated as worth \$ 437,792 and were insured for \$ 306,488: the loss under this head was \$222,006 while indemnities amounted to \$ 151,962. The causes of fires in barns and stables, including twenty-seven such fires in Boston, were distributed as follows: candle, lamp or stove igniting merchandize or other material, 6; careless smoking, 66; careless use of matches, 66; children with matches, 23; defective chimneys, 3; defective heating apparatus, 2; electrical causes, 5; fire-crackers, 3; friction, 1; ignition of gasoline or other volatile oils, 4; hot ashes in wooden receptacles, 5; incendiarism, 19; upsetting lantern, 7; lightning, 36; malicious mischief, 3; boiler in milk-room, 1; overheated heating apparatus, 1; rats and matches, 2; sparks from bonfires, heath or forest fires, 7; sparks from chimneys, 6; sparks from locomotives, 5; sparks from matches or snap matches, 2; sparks from stoves, 2; spontaneous combustion, 34; thawing water-pipes, 5; tramps, 10; unknown, 64.

Part III: Credit

SPAIN.

THE ORGANIZATION OF AGRICULTURAL CREDIT BY THE FORMATION OF A CENTRAL FUND.

OFFICIAL SOURCES:

REAL DECRETO RELATIVO A LA CREACIÓN DE UNA CAJA CENTRAL DE CREDITO AGRICOLA
(Royal Decree relative to the Creation of a Central Fund of Agricultural Credit). *Gaceta
de Madrid*, No. 196, Madrid, 15 July 1917.

OTHER SOURCES (1):

EZA (Visconde de) El problema agrario in España (*The Agrarian Problem in Spain*) Impr.
Bernardo Rodriguez, Madrid, 1915.

THE SPANISH AGRICULTURAL AND ECONOMIC PRESS.

§ I. PRELIMINARIES.

"Our agricultural masses, who form the first step in our scale of production and are necessary to all further production, ask for the circulating capital necessary to all the completing and improving measures of which they have heard for years as means of redemption. In order to procure manures, to secure the use of modern agricultural machinery, to buy animals for breeding, such an expenditure of funds as is impossible to a modest farmer is necessary; and therefore we think it essential to supply such a small farmer, at once owner of some fields and lessee of others — a double capacity which allows him with difficulty to earn a meagre livelihood for his family — with that equipment for his struggle which is in the twentieth century indispensable". The Spanish Minister of *Fomento*, the Visconde de Eza, expressed himself thus in introducing the decree of 21 July 1917.

(1) For the general bibliography of agricultural credit in Spain the articles "L'organisation agricole en Espagne" and "Les problèmes du crédit foncier rural et le Banco Hipotecario de España", published respectively in our issues (*Bulletin Mensuel des Institutions Économiques et Sociales*) for February and July 1912, should be consulted.

The multiplication of facilities for credit in country districts has indeed been for long one of the most important problems of Spanish agriculture and therefore of the national economy. We need not go back to the distant time of the creation of the *pósitos* (1), which at their origin were essentially benevolent institutions, to find the problem of agricultural credit in Spain in the forefront. It was so towards the middle of last century, as a consequence of the loss of the vast Spanish colonial empire and at a time when modern methods of agriculture were generalized. As early as 1841 an ordinance of the regent of the kingdom tended to create *Banks of Agriculturists*, formed with the help of private capital or the available funds of the *pósitos*, to make loans to inhabitants of the rural groups. The parliamentary chronicles notice in 1866 a scheme for a law proposed by Señor Montero Rios on "institutions of agricultural credit and their transactions". In 1899 Señor Gamaza proposed a law based on the reorganization of the *pósitos*. In 1900 a minister, Señor Sanchez de Toca, brought forward a scheme for a law on "agricultural credit for the cultivation and ownership of land" which implied the constitution of local intermediary societies. Finally in 1910, 1912 and 1915 Señors Calbeton, Zulueta and Alba respectively formulated schemes, the first named for an "institution of agricultural credit" based on the *pósitos* and using their capital, the others for an official "agricultural bank". None of these schemes became law, mainly for political reasons.

Public authority for its part attempted to meet the need with all the means of which it disposed, while the general and complete solution of the problem was being attempted. With this object there was promulgated in January 1906 a law which created a royal commission, charged to liquidate the credit of the *pósitos* and to realize their assets in specie, in order to satisfy the needs of modern agriculture more easily (2). Since this liquidation had been largely completed, and since the government saw that while some *pósitos* could not, for lack of capital, satisfy the demand for loans, others, for lack of borrowers, left almost all or a large part of their funds unproductive, the royal decree of 16 October 1914 was promulgated. This decree authorized the constitution of federations of *pósitos*, in order completely to mobilize their capital and extend their sphere of action. The federations were granted the option, if they included *pósitos* disposing of capital, of making loans to agricultural associations. Unfortunately although these provisions were usefully applied in certain districts, they did not in general give the results expected of them, a fact largely due to the defective management of many *pósitos* and the manoeuvres of *caciquismo* which is still dominant in most rural districts of Spain (3).

(1) For these communal granaries, which resemble the Italian *Monti frumentari* and the Portuguese *Celleiros*, see our issues for June 1914 (page 72) and December 1915 (page 67).

(2) See the articles mentioned in the preceding note.

(3) *Cacique*, a word of American origin, denotes anyone who by his position or adhesion to a political party is morally master of one or more local groups and to whom most members of the latter are under obligations. Since *pósitos* long constituted an arm of *caciquismo*, the sus-

At present a Spanish farmer can nominally obtain the credit he needs, outside some establishments having more or less local importance, from the following institutions: the *pósitos*, the Bank of Spain, the Mortgage Bank, the Bank Leo XIII, and the rural funds. We say nominally because, in consequence of the faulty management of which we have spoken, the *pósitos* are far from supplying the needs of the peasants; the Bank of Spain, in spite of goodwill and government encouragement (1) has not the organization and elasticity necessary to transactions in agricultural credit; the Mortgage Bank, although specially founded to help agriculture, is active, almost exclusively, in urban spheres; the Bank Leo XIII, while by its loans to agricultural syndicates it accomplishes really useful and practical work, has its sphere necessarily limited by its connection with the Church and suffers all the consequent inconveniences; and finally the rural funds, except in a very small number of districts like Extremadura and Navarre (2) for lack of resources only vegetate miserably.

To resume: in no country as much as in Spain is capital withdrawn from the country districts, including capital formed there and emanating therefrom, and does it so tend to be invested securely in State funds rather than to find any investment where interest depends on the work and intelligence of those administering it. The farmer on the other hand cannot obtain credit directly from the large urban establishments which in Spain absorb public savings, for these do not know him and do not accept his signature. It follows that it is necessary to create an organism which will be able to procure funds where money is concentrated, placing it at the disposal of peasants to be employed productively. This necessity forms the basis of the *Central Fund of Agricultural Credit* at which the decree which we will examine aims.

§ 2. THE ROYAL DECREE OF 12 JULY 1917.

Under the modest title of "decree relative to the creation of a central fund of agricultural credit" the royal decree of the 12th of July of this year covers the whole problem of agricultural credit and establishes the bases of an organization which will allow of its solution. The measure does not confine itself to setting up an official establishment responsible for supplying money to agriculture. It at the same time defines and regulates the reciprocal relations of the farmers grouped in associations and offering in the collective liability of all their members a sufficient guarantee to lending institutions, and also the relations of these associations with the Central

picion with which they are still regarded by peasants, in spite of the very considerable services they once rendered to agriculture, is easily understood. For *caciquismo* in the Spanish country see *Bulletin des Institutions Economiques et Sociales* for July 1912, page 123.

(1) See our issue for November 1915, pages 33 and 34.

(2) See our issue for March 1915, pages 10 to 27.

Fund formed to act as intermediary between them and the credit establishments.

The object of the decree, as specified in Article 1, is to promote in Spain the employment of capital for the improvement of agricultural production and stock farming by stimulating the formation of agencies for supplying the materials and machinery needed by the technique of modern agriculture, and by endowing these agencies with the necessary pecuniary resources. With this object, says the decree, the State will endeavour to develop the spirit of association as well as the associations themselves, forwarding that educational activity which causes the need for them to be born and felt, indicating which forms of them are most suitable with the help of all official or private organizations already in being, exercising by means of advice a directive influence over such as are constituted, seeing that they command the capital necessary to their life and development, and taking steps to obtain from banking and commercial companies that they collaborate by employing all their available funds on the work of expanding the agricultural associations. Such are the social functions entrusted to the new Central Fund.

To resume, the terms of the decree may be summarized in the following points which show the basis on which an institution of agricultural credit is to be set up in Spain : *a*) the creation of an official central agency which will dispose of contributions furnished by the privileged and free banks and the State, and will seek to invest in the country districts the money forming the savings deposits of establishments belonging to the urban banks, and to forward rural association as a basis of credit ; *b*) the constitution and regulation of agricultural associations ; *c*) the determination of transactions in agricultural credit ; and *d*) the preservation and modernizing of the *pósitos* by completing their liquidation and adapting their methods to the needs of modern agriculture and of the bank.

I. The Central Fund of Agricultural Credit and its Business.

The constitution and working of the Central Fund of Agricultural Credit formed by the decree in question imply no original idea for, as the preamble to the decree expressly indicates, the provisions governing the Fund have been borrowed indiscriminately from all central banks and from like organizations in many countries, particularly Poland, Germany, Italy and Rumania. However in view of this catholicity, and of the adaptations which have taken place to suit both the necessities and the possibilities of Spanish agriculture, a short examination of the organization and the business of the establishment which has been created will not be without interest.

In addition to the functions we have mentioned, aimed at encouraging and multiplying agricultural associations by moral and pecuniary support and by a supervision which will ensure their normal development, and at intensifying the financial relations between these associations and banking organizations by advancing the investment of the funds of the latter in combinations for agricultural credit, the principal transactions of the Central Fund will be as follows :

a) to endorse bills or become answerable for payments when operations are effected with or loans made to agricultural societies, in determined cases and conditions ;

b) to procure that agricultural associations group themselves in provincial or district federations, thus uniting the individual or collective savings of their territorial spheres for local productive use, and thus procuring needed funds for certain associations, and for others an investment for excess funds, or in other words enabling available funds to circulate ;

c) to receive interest-bearing deposits from these associations or federations by assigning funds to the business of making loans (the district federations or funds will, where they exist, form the link between the Central and the local funds, and the form of and security for business of the kind will be established with this end in view) ;

d) to receive from the public deposits on current account, deposits withdrawable by cheque, and savings deposits, always using these funds exclusively for the business of agricultural credit, in accordance with the functions entrusted to the Central Fund ;

e) to open current credit accounts with the *pósitos*, the rural funds, the syndicates and the federations and other agricultural organizations, on the personal, collective and unlimited guarantee of the members where the latter organizations are concerned or the real guarantee of their capital in the case of the *pósitos* ;

f) to grant to the agricultural institutions already mentioned loans amortizable in one or more payments. These loans could be granted on the collective and unlimited guarantee of the members, or on the products of agriculture or stock farming or their derivatives, on draught animals, agricultural machinery, standing or stored crops or other like pledges which would remain in the hands of the borrower, in accordance with a special regulation to be published ;

g) to grant loans also to farmers on any of the guarantees enumerated in paragraph f), or to open for them credit accounts like those mentioned in paragraph e), either on the direct and exclusive guarantee of those interested or with the subsidiary guarantee of a syndicate. These loans will not exceed a maximum of 20,000 pesetas (1) and cannot be made for a longer term than three years ;

h) to issue, in virtue of the operations already enumerated and up to the amount of the sums lent or invested, *agricultural bonds* or other bonds, repayable within a determined period or by drawing lots. Premiums, payable at the time of repayment, may be granted to these bonds. The total sum of the agricultural bonds in circulation will not exceed the amount of loans, as that of the special bonds will not exceed that of the operations they represent ;

i) to negotiate the securities already mentioned and grant loans on them. Those operations are excluded which the Central Fund may conclude in issuing the securities in question and which are guaranteed by

(1) 1 peseta = about $9\frac{3}{5}$ d. at par.

landed property. The Central Fund may lend funds to other agricultural institutions, even if these undertake business of this kind, but may not in such case issue bonds for a sum in excess of that part of the loan which these institutions guarantee exclusively in the form indicated in paragraphs e), f) and g).

The most important of the functions of the Central Fund which aim at intensifying the contact between banking establishments and agricultural associations is indubitably the influence it should exercise on the relations between the syndicates and the rural funds and the Bank of Spain, which is the official issuing establishment. The Central Fund of Agricultural Credit may foster these relations in two ways, namely :

1) The syndicates will determine what sums they need for their operations and prepare a list distributing these according to the amount demanded by each member. This work once accomplished, and the guarantee of the solvency of each syndicate having been fitly established, each syndicate will draw on each of its members an order for the sum granted to him, and when this bill has been accepted by the Central Fund the syndicate, having endorsed it, will discount it at the Bank of Spain, thus rapidly and easily obtaining the funds necessary to its business. The bank should for its part obviate two inconveniences. One consists in presenting the note at the home of the member on the day on which it falls due, and can be avoided by appointing as the place of payment the headquarters of the agricultural syndicate or the capital town of the province. The other consists in the costs of a renewal. This operation may by the care of the syndicate be effected at the competent branch of the bank without troubling the member. The costs in question will then be taken into account in the bonus which the bank will allot to the syndicates for their intervention in these operations.

2) The bank will open for the district funds depending on the Central Fund a credit account, guaranteed by the commercial bills which the syndicates will remit to these funds and on which the bank will advance sums to the funds in question for their operations. Thus each syndicate, after having brought together and classified the individual demands of its members, will subscribe a bill or note to the district fund for the total amount of the loans demanded by its members. The Central Fund will take all necessary precautions to ensure the good working and the perfect solvency of the syndicate in question ; and if its decision is favourable it will endorse the bill, already signed by the syndicate, to the Bank of Spain which will discount it if it is for a short term, or accept it as guarantee of the afore-said credit if it falls due in a longer term than three months, but not if this term is longer than the nine or twelve months which cover the cycle of agricultural operations.

The Central Fund of Agricultural Credit will be constituted with an initial capital of 10,000,000 pesetas in shares of 500 pesetas each, of which half must be paid up when the fund becomes active. This capital will be subscribed as follows : 2,000,000 pesetas by the *pósitos*, deducted from the

unproductive funds placed at their disposal by the Royal Delegation (1) and 2,000,000 pesetas by the Bank of Spain. The last 2,000,000 pesetas of shares will be at the disposal of the ordinary banks and agricultural associations of a general character, which must subscribe at least 100,000 pesetas each in order to form part of the directing committee. If a sum remain available the Mortgage Bank of Spain will be authorized to subscribe shares for its amount.

The Central Fund in question will have the character of a co-operative association for it will do business only in the interest of agricultural associations and with them exclusively. With this end in view capital will bear a fixed interest which may not exceed a total of 6 per cent. This interest once paid, any remaining profits will be divided as follows: 50 per cent. to constitute a reserve fund and 50 per cent. to the syndicates *pro rata* of their operations with the Central Fund. From the time when the reserve fund becomes equal to half the subscribed capital only 10 per cent. of profits will be paid into it compulsorily.

The Central Fund will constitute a legal person and act quite independently in all its business. It will be administered by a directing council, comprising a chairman freely nominated by the government whose post will be permanent (2), a representative of the *pósitos*, a representative of the Bank of Spain and one of the Mortgage Bank, all three freely chosen by these establishments, and a delegate of each of the following bodies which has subscribed a minimum of 100,000 pesetas — General Association of Stock Farmers, Association of Agriculturists of Spain, Catalan Agricultural Institute of San Isidro, Bank Leo XIII, and Association of Cultivators of Saragossa. Every other association, being strictly co-operative and agricultural and general in character and subscribing the aforesaid minimum, can have a delegate in the council.

The Ministers of Finance and of *Fomento* will exercise supervisory functions over the Central Fund. The former will have the higher supervision of its economic activity which he will determine, and the latter will be concerned with the whole work of agricultural organization incumbent on the Central Fund in virtue of the objects for which it is instituted.

The directing committee will fix the bases of the rates of interest, the terms granted for repayment and the security on which the Central Fund will make loans.

All documents and books, bills payable on order, and discount or credit books and bills which the agricultural associations issue in the course of their relations with the Central Fund will be exempt from the stamp duty.

The Central Fund of Agricultural Credit keeps for five years, as the decree instituting it expressly states, an experimental character. After

(1) See our issue, already cited, for March 1915, pages 10 et seq.

(2) By royal decree Count de Montornes, delegate of Spain to the general meeting of the International Institute of Agriculture, has been nominated chairman of the Central Fund of Agricultural Credit.

this period the system defining the exercise of agricultural credit in Spain will be submitted to parliament, the lessons of experience being duly taken into account.

II. *Definition of Agricultural Associations. The System.*

Agricultural credit having been organized as stated, it became necessary to multiply in the Spanish country districts the rural associations which form its basis, and to encourage their creation where they do not yet exist. The possibility of obtaining capital at a low rate and on good terms is in itself a sufficient stimulus to the constitution of intermediary associations ; but it was further indispensable to eliminate as far as possible obstacles of an administrative kind which might in any way impede the movement towards association.

Owing to lack of precision in the law of 1887 on associations and the law of 1906 on agricultural syndicates (1), organizations having a political, commercial or other character, and having nothing in common with the institutions in favour of which these measures were framed, often shared the advantages provided by legislation. Therein lies the justification of the extreme severity evinced by the competent administrative agencies in examining the by-laws and rules of the societies which asked to be registered in conformity with the aforesaid laws. The necessity of possessing sufficient information to enable registration to be granted or refused caused, in most cases, instructions with respect to the applications for constitution, which new rural organizations presented, to be issued very slowly. Moreover in some doubtful cases the administration showed some narrowness of judgement, a circumstance which was not surprising since the advantages of registration consisted ultimately in certain fiscal exemptions.

To eliminate these obstacles it was necessary to satisfy a long-standing demand of the Spanish rural class, that is clearly and sharply to define agricultural co-operation and association, determining how they should be active in forms which would serve as models to future agricultural associations constituted according to the laws already cited, and which would serve as a basis on which the public administration could rapidly meet demands for constitution. To this necessity the definitions of chapter II of the decree respond, definitions which, we should state, were established by the International Committee of Agriculture at its meeting of 1912 (2).

According to these provisions agricultural association is "the agreement by which two or more persons permanently pool their knowledge, activity or economic resources to study or protect, create or improve means for advancing the progress of agriculture and the improvement of the economic or social condition of the parties to the agreement, by adopting the principles of co-operation".

(1) See the paper on co-operation in Spanish agriculture in our issues for March and May 1915.

(2) See *El Problema agrario en España* by Vizconde de Eza. Madrid, impr. Bernardo Rodríguez, 1915, pp. 197.

The co-operative associations contemplated by the decree may be for consumption or production or for affording credit, or they may have mixed objects.

The co-operative credit societies, which are most interesting as regards the circulation of capital in the country districts, may have limited or unlimited liability or be mixed in form. Their business will include discounting advances, loans, and the acceptance of remittments or deposits, and will be transacted only with their own members or other agricultural co-operative societies. Thus all rural co-operative societies, whether credit societies or other, can equally profit by the advantages of the decree as to obtaining capital. The co-operative credit societies can borrow from persons outside their association, receive their deposits and discount their bills, but with the sole object of effecting these operations with their own members or increasing their circulating funds. The distribution of profits will take place — be it noted — among members, in proportion to the sums they have paid to the association as interest on operations effected with it, and it will be in the form of a rebatement of interest.

The agricultural co-operative associations defined by the decree considered will be subject, as regards their constitution and working, to the law of 1887 on associations and the law of 1906 on agricultural syndicates, and will enjoy the benefits granted by the latter law.

§ 2. THE OPINION OF THE AGRICULTURAL AND ECONOMIC WORLD ON THE CENTRAL CREDIT FUND.

Before we end this short study of the new organization of agricultural credit in Spain we will, to facilitate the reader's estimate of its fitness to the agricultural and social situation of the country, shortly notice some commentaries on it published in the technical press. We will analyse them objectively, relying on the considerations we have explained. Repeated allusion to these criticisms has on occasion been made by the minister who was author of the innovation when he has brought it before the public.

The independent agricultural press, beginning with a widely circulated periodical, *La Lega agraria*, does not stint its praise of the new decree. The paper mentioned even writes of the Central Fund that it sees "a wave of riches pass to the country districts at the mere appearance of this redeeming institution" (1). But at the same time another section of the press, which reflects the opinion only of industrial and banking circles, is less favourable to the organization set up to supply credit to agriculturists. One of the most important organs having this tendency is the weekly *España Económica y Financiera*. We think it pertinent to our end to examine this

(1) "El país agrícola de enhorabuena", *La Liga Agraria*, No. 1314, Madrid, 20 July 1907.

paper's (1) objections and oppose them with purely agricultural opinion and ministerial arguments.

The first objection to the decree is that the State intervention on which it is based is not pertinent to the solution of the problem.

To justify the government's agrarian policy in this case we will reproduce a passage from the explanation of the reasons for the decree in question. The minister expresses himself as follows: "In the Spanish rural class it is impossible to insist on certain conditions of preparation where banking and production are concerned. The conflict which is always pending between State intervention and free initiative must be decided, where national agriculture is concerned, by proclaiming that it is the State's duty to stimulate and favour the movement of capital towards the country and to awaken in farmers sentiments which will enable them to learn, to develop and to reach a position in which their signature will have a market value. On the intensification of this movement depends the very existence of the nation. A typical case is present for State intervention". We should add that the rural classes have, owing to the lack of private initiative, never ceased to ask for this intervention.

A second objection is that before creating a central organ, set over the local organs, it is necessary that the latter should exist and be multiplied throughout the country. The Central Fund cannot create the local organs contemplated, for the Spanish character, especially the character of the peasants, is not only indifferent but also definitely opposed to association. This is what is said in financial circles, but the truly agricultural circles answer that this second objection is itself an argument which refutes the first and justifies the State intervention thereby criticized. The *Liga agraria* says in this connection, "Does not the spirit of solidarity exist among us? The Central Fund was created for this educative task. Will not all the loans be co-operative? This condition alone ensures its existence. To affirm the contrary is to disregard the inclinations of the race when it is well directed. You say that this spirit cannot lead far. To lose this fear you need only look at the marvellous co-operative and social movement which has already reached the smallest village (2)".

(1) See "La Caja Central de Crédito agrícola" in *España Económica y Financiera*, No. 1271, Madrid, 28 July 1917.

(2) According to the official data of the Ministry of *Fomento* in 1914 the following organizations aiming at encouraging the development of agriculture were then active:

Chambers of agriculture	106
Communities of agriculturists	100
Agricultural federations and agricul- tural associations	660
Agricultural syndicates	1,530
Rural savings and loan funds	517
Economic societies	46

2,959

For the movement towards association and co-operation from the general point of view of agriculture see the article already cited on co-operation in Spanish agriculture.

Another criticism put forward is perhaps that one which would have most weight with regard to the improvement of the farmer's economic position. It is as follows. The Spanish farmer needs money for sowing and paying for necessary work and for his livelihood until his harvest is gathered. When once he has obtained this money he is preoccupied by the necessity of paying it back, and as soon as his crops are ripe he is in a hurry to harvest and sell them. In other words he sells immediately after the harvest when everyone in the same situation as himself is also selling his produce, that is when prices are lowest, and he leaves to others the profit of the rise in prices which always occurs a few months later. How then is it possible that a perfect organization of agricultural credit should not take these facts into account?

To these arguments the public authority answers that the establishment of warehouses for the products of agriculture and stock farming, to which the preceding objection implicitly alludes, is a co-operative function, and that, like the purchase of the materials of agriculture in large quantities and the sale on commission of country produce, it cannot be organized so that it fulfils its object except by means of central federations and local co-operative societies. The latter must organize — and the State must help them — the large groupings which will embrace the whole movement of agricultural co-operation. The contrary course would be to create a great commercial company in the form of an agricultural fund or bank. As to the fact that warehouses exercise credit in that they can grant loans on the security of deposited products, their working demands an exclusive and special organization with which no organization of personal credit, such as the Credit Fund under consideration, should be mixed (1).

As regards the role of intermediary entrusted to the Central Fund, the form established by the decree is approved, for general opinion recognizes that in Spain contact must first be established between privileged or free banks and the large agricultural associations which know the district and smaller local societies and can introduce them to the banks. Thus the machinery will be complete, and the organ created will be able to act independently and to use for the accomplishment of its task a network of associations as serried as it is vast.

The participation of the *pósitos* in this new organization has also been favourably received. In rural circles there is a conviction that these establishments could not be suppressed, in spite of the ills which have affected them in the last two centuries. In order that they may again render the services which were once their distinction it is only necessary, according to the most generally received opinion, to complete the liquidation of their property and their credit, and then to modernize their functions and entrust their administration to independent persons, technically competent. But until this transformation is effected, and in order to prepare

(1) See in this connection the *Boletín de la Asociación de Agricultores de España* for October 1916, pages 283 et seq.

for it, it is just that the *pósitos*, with a part of the capital of which they now have not the use, collaborate in the modern organization of the credit entrusted to the Central Fund. They will thus enter into a movement which will rapidly lead them to that transformation on which the usefulness of their existence depends.

To resume: the organization of agricultural credit in Spain, as established by the royal decree of 12 January 1917, has made a favourable impression in the economic and agricultural circles of the country, with the exception of a small section of opinion in banking and industrial circles. It can therefore be affirmed that this organization is very well adapted to the sentiment of agricultural society. Only the results which will be obtained in practice can tell us if the agency which this decree has formed is fitted to its object and in what measure it is so. This is the reason that the minister who is its author has left an experimental character to the Central Fund of Agricultural Credit, in order later to give it a definite form when the modifications which experience shows to be necessary have been introduced into it. Already however it is possible to affirm that the organization which is the object of the decree meets an inevitable need of Spanish agriculture, that of supplying farmers having modest resources with the capital they require. Therefore it is permissible to hope that it will not be necessary to wait long for the happy consequences of so important a measure.

ITALY.

THE ACTIVITY OF INSTITUTIONS OF LAND CREDIT IN 1916.

SOURCES:

- ISTITUTO ITALIANO DI CREDITO FONDIARIO (*Italian Institute of Land Credit*). Ordinary general meeting of shareholders on 28 February 1917. Report of administrative council and directors for 1916. 26th year. Rome, 1917.
- CREDITO FONDIARIO DELLA CASSA DI RISPARMIO DELLE PROVINCE LOMBARDE IN MILANO (*Land Credit of the Savings-Bank of the Lombard Provinces at Milan*). Complete Balance-Sheet for 1916. 49th year of business. Milan, 1917.
- CREDITO FONDIARIO DELLA CASSA DI RISPARMIO IN BOLOGNA (*Land Credit of the Savings-Bank at Bologna*). Minutes of the general meeting of shareholders held on 1 April 1917 and report for 1916. 80th year of business. Bologna 1917.
- ISTITUTO DELLE OPERE PIE DI SAN PAOLO IN TORINO (*Institution of the Works of Charity of St. Paul in Turin*). Complete account of the year 1916. Credito Fondiario, Turin, 1917.
- MONTI DEI PASCHI DI SIENA. Complete account of the year 1916. Siena, 1917.
- REPORTS FOR 1916 OF THE OTHER INSTITUTIONS OF LAND CREDIT ACTIVE IN THE KINGDOM.

§ 1. THE ORGANIZATION OF LAND CREDIT.

Land credit is afforded in Italy by the following State-regulated institutions — the *Istituto Italiano di Credito Fondiario* at Rome, the *Istituto delle Opere Pie di San Paolo* at Turin, the *Monte dei Paschi* at Siena, the *Credito Fondiario Sardo* at Cagliari, and the savings-banks of Milan, Bologna and Verona.

A royal decree can authorize other bodies to practise this form of credit, in particular mutual associations of landowners possessing real estate of a value not less than 5,000,000 liras (1), societies and institutions having a paid-up capital of 10,000,000 liras, and those having a capital between this sum and 2,000,000 liras, in districts in which there is no local body affording land credit.

The land credit business of the savings-banks of Milan and Bologna, of the *Istituto delle Opere pie di San Paolo*, of the *Monte dei Paschi* and of the *Istituto di Credito Fondiario* may be undertaken in all the provinces of the kingdom. The savings-bank of Verona is authorized to afford credit in the Venetian provinces and the province of Mantua, the *Credito Fondiario Sardo* in the island of Sardinia.

The business which these institution may undertake is regulated by minute legal provisions and is various. It consists principally in granting

(1) 1 lira = 9 3/5 d at par.

loans on first mortgages on real estate up to half the value of the latter. Such loans are repayable gradually by annual instalments, within a period not less than ten or more than fifty years. The annual instalment includes the amortization quota, interest, the tax on income, commission and expenses of administration, and the quota of the sum repaid which is due as the tax to the Treasury, the latter being paid directly by the various institutions on behalf of those who borrow from them. The debtor can however free himself in advance of all or part of the debt, making the payments we have mentioned to the lending institution and the Treasury.

The institutions of land credit are further able to acquire, by cession or substitution on the same conditions as the loans, mortgage or privileged credit, the debts being repayable by amortization.

They procure the necessary means for operations of these two kinds by issuing land bonds bearing interest at the various rates of $3\frac{1}{2}$, $3\frac{3}{4}$, 4, $4\frac{1}{2}$ and 5 per cent., thus avoiding the great oscillations of the financial market. Loans are made in bonds at a rate of interest equal to that of the bonds issued for the purpose of making them. These bonds have a nominal value of 500 liras and can be payable to bearer or nominative. They are gradually redeemed at par, that number of them being withdrawn every half-year which corresponds to the amount of the amortization due by the borrowers in the preceding half. The total land bonds issued are secured by the total mortgages held, the holders being thus safeguarded.

Landowners in no immediate need of capital but only of ready money can, before they apply for the loans regularly made in the form of bonds, obtain that a current account, secured by a mortgage, be opened for them, and that advances in cash be made to them on this account, at a varying rate of interest determined by the institutions.

We will now briefly examine the work which these institutions of land credit accomplished in Italy in 1916.

§ 2. THE "ISTITUTO ITALIANO DI CREDITO FONDIARIO".

This Italian Institute of Land Credit (I) was constituted in Rome on 7 February 1891, having by its by-laws a capital of 100,000,000 liras of which 40,000,000 liras were paid up.

In its report on the results of last year's business the administrative council shows that in spite of the difficult times the course of affairs was satisfactory.

In 1916 applications to the institute for loans numbered 183 and covered 21,254,500 liras, as against 71 applications for 5,992,000 liras in 1915. Thus applications increased by 112 and were for an amount which had increased by 15,262,500 liras. The increase would have been larger "if the institute

(1) See in this connection the interesting monograph "L'opera dell'Istituto Italiano di Credito Fondiario nei 23 anni dal 1891 al 1915". Report of the director general to the council of administration, Rome, 1916.

had not, in its desire to devote itself preferably to improving rural property, limited its acceptance of applications for loans on urban lands ”.

Contracts for loans definitely concluded in 1916 numbered 93 and were for 7,374,000 liras, while in 1915 they numbered 74 and were for 6,389,500 liras. They might have been represented by a far higher figure “ if they had been concluded proportionately to the remarkable growth in 1916 of the demand for paper as compared with the circulating funds on the market ”.

The amount of the loans concluded had to remain far below that of the resources of which the institute disposed, because the number of applications in the case of which enquiries could be prosecuted was limited. The abundance of money, the calls to arms, and the uncertainty involved in undertaking in present circumstances engagements binding in the far future, were the chief causes of this phenomenon.

Loans contracted for, as mentioned, in 1916 are guaranteed by securities of the value of 16,693,492 liras, and are distributed as follows according to the nature of such security.

	Number	Amount — Liras	Value of Security — Liras
Loans on rural properties . .	63	5,251,500	10,076,192
“ “ urban “ . .	30	2,122,500	6,617,300
Total . . .	93	7,374,000	16,693,492

The loans are distributed as follows geographically :

	Number of loans —	Amount — Liras
North Italy	5	263,000
Central Italy	35	3,289,500
South Italy (including the islands)	53	3,821,500
Total . . .	93	7,374,000

They can be classified as follows in accordance with the sums lent :

	Number	Liras
up to 20,000 liras	28	371,000
from 20,500 to 50,000 liras	17	571,000
from 50,500 to 100,000 liras	24	1,885,000
from 100,000 to 500,000 liras	24	4,547,000
Total . . .	93	7,374,000

Out of the total loans contracted for in 1916 the sums assigned to the extinction of the more burdensome mortgage liabilities of earlier date and the emancipation from burdens amounted to more than two and a half millions, as follows:

For the extinction of mortgage liabilities. . . .	2,666,278.58	liras
For emancipation from burdens	4,728.00	"
	<hr/>	
Total	2,671,006.58	'

The mortgage liabilities discharged with the loans were subject to various rates of interest: 1,121,817.83 liras to 5 per cent. or less; 1,438,460.75 liras to from 5 to 6 per cent.; 106,000,000 liras to from 6 $\frac{1}{2}$ to 7 per cent.

From 1891 to 1916 the loans granted numbered 3,494 and were for 283,970,050 liras. On 31 December current credit amounted altogether to 188,305,247 liras.

The position of the institute on 1 January 1917 was as follows: capital in shares 40,000,000 liras; reserve as by by-laws 2,521,218.25 liras; available reserve 1,316,373.85 liras; reserve for oscillations of values 130,395.23 liras; deferred reserve 3,989,055.21 liras; profits remaining from 1916 — 18,612.18 liras; total 47,975,654.72 liras.

§ 3. THE LAND CREDIT OF THE SAVINGS BANKS OF MILAN, BOLOGNA AND VERONA.

As appears in the last report of the *Credito fondiario della Cassa di risparmio delle province lombarde* new loans in 1916 were somewhat limited in number and had increased only slightly since the previous year. This is to be attributed "exclusively to the conditions of the financial market, the fall in the price of land paper impeding the stipulation of new loans while it favoured the advanced repayment of capital".

The loans stipulated in the year numbered 197 and were for 12,947,500 liras, the increase since 1915 being in number one of nine and in amount one of 2,047,500 liras. Anticipated repayments in paper amounted to 3,540,000 liras in 1915 and to 6,567,500 liras in 1916.

Fifty-two loans for 5,136,000 liras were granted on the security of rural properties; 140 for 7,586,500 liras on that of urban properties; and five for 225,000 liras on that of property partly rural and partly urban.

Among the provinces which received most credit on the security of rural property, Pavia obtained two loans for 1,125,000 liras; Milan seven loans for 1,048,000 liras; Parma one for 460,000 liras; and Cremona three for 446,000 liras.

More than half the loans were of sums between 1000 and 50,000 liras.

On 31 December 1916 there were in circulation 2,878 bills of the 5 per cent. series; 90,404 of the 4 per cent. series; and 327,845 of the 3 $\frac{1}{2}$ per cent. series. Their total amount was 210,563,500 liras.

The *Credito fondiario della Cassa di risparmio di Bologna* stipulated 68

loans for 3,115,500 liras in 1916. Of these loans 46 for 1,670,500 liras were secured by urban lands, 21 for 1,295,000 liras by rural lands, and one for 150,000 liras by a property partly rural and partly urban. Four loans varied in amount between 500 and 5,000 liras, nine between 5,000 and 10,000 liras, eleven between 10,000 and 20,000 liras, fourteen between 20,000 and 30,000 liras.

The province of Bologna received most credit, namely 61 loans for 2,860,500 liras.

From the time this savings-bank was founded in 1868 until the end of 1916 there were stipulated 3,451 loans for a sum of 133,921,500 liras, the average amount of a loan being 38,806 liras.

The *Credito fondiario della Cassa di risparmio della città di Verona* granted in 1916 fourteen loans amounting altogether to 513,500 liras.

§ 4. THE " ISTITUTO DELLE OPERE PIE DI SAN PAOLO " AT TURIN, THE " MONTE DEI PASCHI " AT SIENA AND THE " CREDITO FONDIARIO SARDO " AT CAGLIARI.

The loans stipulated in 1916 by the land credit of the *Istituto delle Opere Pie di San Paolo* at Turin numbered 118 and were for 5,752,500 liras. They were distributed as follows :

on urban lands .	99	loans for	4,312,000	liras secured by mortgages of	9,731,375	liras
on rural lands .	13	" "	543,000	" " " "	1,190,532	"
on lands both ur-						
ban and rural .	6	" "	897,500	" " " "	2,103,700	"
	118	" "	5,752,500	" " " "	13,025,607	"

Large loans prevailed : one was for 600,000 liras and seven for 2,495,000 l., and thus eight loans represented almost 54 per cent. of the total sum lent.

The term of loans was usually from thirty-six to fifty years. In 1915 the lending contracts concluded numbered 160 and covered 7,628,000 liras. Thus in 1916 the number of loans and the sum of capital lent were less than in 1915, partly owing to the abundance of money. The price of the bonds varied from a minimum of 432 liras to a maximum of 448 liras.

Loans in being on 31 December 1916 numbered 2,410 and were for 91,629,295 liras.

In 1916 the *Monte dei Paschi* at Siena granted in bonds sixty loans, for 1,222,500 liras in all.

The *Credito Fondiario Sardo* granted in the same year five loans for 81,000 liras. Loans in being at the end of the year numbered 179 and were for 2,710,157 liras.

* * *

Thus the seven institutions which we have mentioned as affording land credit in Italy granted 555 loans for a total sum of 31,006,500 liras in 1916.

MISCELLANEOUS INFORMATION RELATING TO CREDIT IN VARIOUS COUNTRIES.

UNITED STATES.

THE FIRST YEAR OF THE FEDERAL FARM LOAN ACT. — *The Economic World*, New York, 22 September 1917, article reprinted from the *Journal of the American Bankers' Association*, September 1917.

The Federal Farm Loan Act was passed on 17 July 1916 (1). It is interesting to take stock of the difficulties that have occurred in applying it and of the degree in which it has satisfied the need for credit of the rural population of the States. The twelve Federal Land Banks had up to 1 August 1917 made loans amounting to \$3,940,400. This total represents loans approved and actually made out of a sum of about \$100,000,000 for which application was made. About \$50,000,000 of this latter sum was applied for through formally constituted channels. The remainder represents the amount which National Farm Loan Associations still unchartered have reported that they wish to borrow as soon as they have perfected their organization.

The lending business did not begin in earnest until July. During that month the machinery of the system was thoroughly in working order and money was put out rapidly. The following figures explain the lending business in July, 1917.

Federal Land Banks	Amount applied for	Amount of approved loans	Amount of loans made	Total amount of loans made up to August 1917
	\$	\$	\$	\$
Springfield	735,785	479,100	29,900	36,600
Baltimore	1,261,211	551,400	177,000	257,057
Columbia	2,199,423	1,042,824	43,200	43,200
Louisville	1,547,257	2,072,200	243,000	250,000
New Orleans	10,417,708	3,868,878	149,950	210,265
St. Louis	4,553,560	1,651,620	87,899	—
St. Paul	3,541,250	1,290,300	83,400	115,100
Omaha	3,435,326	985,090	55,450	101,150
Wichita	3,435,090	2,968,950	784,900	1,771,100
Houston	2,788,681	1,350,561	93,130	121,130
Berkeley	—	—	—	391,700
Spokane	3,953,361	2,724,880	434,630	642,005
	34,310,652	16,016,853	2,232,059	3,940,407

(1) See our issues for December 1916, p. 65 and April 1917, p. 55.

The Federal Farm Loan Board believes that loans will now be made with increasing rapidity. The Federal Land Banks were at first handicapped by lack of funds. Some of them made loans in excess of their capital stock, themselves borrowing money to do so in the outside market. The sale of farm loan bonds is however now well under way. The Land Banks and the private banking syndicate which are marketing these securities have already obtained subscriptions aggregating about \$30,000,000. As soon as this money is collected it will be issued to the farmers at the 5 per cent. farm mortgage rate which has been established by the board. The bonds yield interest at the rate of $4\frac{1}{2}$ per cent. The banks expect to pay the expenses of operation out of the margin of $\frac{1}{2}$ per cent. It is the intention of the board ultimately to bring about such complete organization and so to perfect its machinery that this margin will be only $\frac{1}{8}$ per cent. The policy will be to put the saving into the pocket of the farmer rather than the investor in bonds, that is to reduce the mortgage rate rather than increase the yield of bonds. What effect an increase in the war bond rate will have on the sales of these land securities is conjectural. The board believes that the land bonds will go on selling because it will tell the public that to finance the farmer is as important to the war as to finance the soldier, if not more so.

Two elements retard the making of farm loans — the lack of trained men in the banks and the difficulty as to farm titles.

The Federal Land Banks are paying small salaries to appraisers of land, which has made it difficult for them to secure the competent service needed to make their loans safe. Their work is moreover new and they cannot yet be presumed to have passed the experimental stage.

As regards titles it has been found on examining applications for loans that an unexpectedly large number of farmers cannot furnish legal evidence of these. They are not uncertain but merely unattested. Under the statute the Land Banks cannot lend on lands held by such uncertified titles. There is further a lack of uniformity, the attestation of titles being more difficult in some States than others, and every farm loan district embraces several States.

The banks have been led to advocate the adoption of a uniform system of registering titles. Should it be made universal by Federal law farmers would have no difficulty in proving their titles by a reference to the registers. It may be expected that the Farm Loan Board will make some recommendation of this kind to Congress in next winter's session.

The board originally contemplated selling from \$100,000,000 to \$150,000,000 in farm loan bonds a year. Unless the machinery for the actual granting of loans is made to work more quickly it is unlikely that they will be able to do this.

A considerable access of business was expected this autumn because farmers would want money for autumn planting. The board hopes that before next spring — the first full planting season since the system has been completely at work — it will be able to grant loans more expeditiously on all properties which deserve to be financed.

The Federal Land Banks and the Federal Farm Loan Board may prove to be suitable means for the solution of problems even of national importance. It is reported that in certain Southern States the British government has requested British subjects holding in them farm mortgages to call for the payment of the loans and withdraw the money from the country to invest it in British government war issues. It is credibly asserted that the mortgage loans affected amount to nearly \$110,000,000 — far more than the farmers would immediately procure from American investors. Only the Federal Farm Loan system seems to be in a position to take up these obligations. It may have to solve a yet larger problem. In order adequately to participate in the flotation of the war bonds of the United States government, the American life insurance companies may have to reduce to some extent their present large holdings of farm mortgages. Here again the Federal Farm Loan System may be the only recourse open to farmers obliged to pay off maturing mortgages which they had expected to be able to renew indefinitely.

Part IV: Agricultural Economy in General

UNITED STATES.

THE ORGANIZATION OF THE SAMPLE TRADE IN GRAIN IN MINNESOTA.

SOURCE:

THE GRAIN GROWERS' GUIDE, 6 June 1917, Winnipeg (Manitoba).

The enormous grain production in the United States has necessitated a special organization of the grain trade, which has been perfected little by little, and has gradually succeeding in taking the business of estimating grain from the individual, arbitrary and interested judgement of purchasers, and giving it to a body of experts, against whose supervised decisions there is however an appeal. Grain is rapidly classified by a preliminary sampling of consignments in course of transport, and a firm basis for commercial transactions and a safeguard for the interests of growers are provided.

The State of Minnesota provides a typical example of the sample trade. We will explain in detail its organization, which functions with much regularity.

§ 1. THE AGENCIES FOR THE INSPECTION AND CLASSIFICATION OF GRAIN.

In Minnesota grain is sampled and inspected by two independent systems which mutually check each other — the system for which the State itself is responsible, and that due to the Minneapolis Chamber of Commerce or, when grain is discharged at Duluth, the Duluth Board of Trade.

All grain handled at St. Paul, Minneapolis, and at Duluth is governed by the Minnesota laws as to grain and weights and measures, and subject to rules and regulations of the Minnesota Railroad and Warehouse Commission. The latter has three members, elected by the people, and has very wide powers. It makes rules which govern terminal elevators, appoints a chief grain inspector and his deputies, issues all warehouse licenses, supervises the handling, inspecting, weighing and storing of grain, and investigates complaints of fraud and injustice. It not only deals with elevator

companies, but also exercises over the railways a control which obliges them to do their best to make the conditions of marketing grain at their various tations efficient and satisfactory.

s The Minnesota Railroad and Warehouse Commission is thus the higher official agency for the control of the trade in grain. We will presently show that a special department has the duty of sampling and classifying consignments.

The Minneapolis Chamber of Commerce was formed thirty-three years ago. In the seventies little if any grading of grain was done locally or at termini in Minnesota, and where the operation did take place it was individual and arbitrary. Fair deductions for the foreign substances mingled with grain were not made, the farmer with dirty grain receiving a less price. Wheat growing was largely confined to areas along the Mississippi river, and wheat markets were along this waterway. Buyers made bids for a farmer's grain on the street and he usually received several bids before it was sold. Later a similar system extended itself to various points on the fast expanding railways. Then a large milling industry began to spring up in Minneapolis, and millers competed at local points throughout the country, the farmer often getting more from them for his grain than millers at the head office were willing to pay. The millers consequently formed the Minnesota Millers' Association which had a system of buying grain according to grades. This association almost entirely controlled the grain market in Minnesota for a number of years and was the strongest defender of the grading system. Finally however the other grain firms and commission merchants joined together and established the Chamber of Commerce which grew rapidly, and a sample market was soon in existence. The Chamber of Commerce has 550 members but some forty companies own and vote for a majority of these memberships. The large milling companies, the line elevator companies and some of the banks are the greatest membership owners. A board of arbitration and a board of appeal are elected annually, and to these all disputes between members, arising in virtue of their membership, may be referred. They are first referred to the board of arbitration, against whose decision appeal may be made, if the losing party desire, to the board of appeal whose decision is final. In addition persons not members of the Chamber of Commerce may place any dispute they have with a member of that chamber before the board of arbitration.

§ 2. THE WORK OF SAMPLING AND INSPECTING.

A) *The Work of the State.*

There are three railway systems as well as branch lines which lead into Minneapolis. On each of them, at a distance of about 150 miles from Minneapolis, there are divisional points at which the State grain inspection

department maintains a staff which samples every carload of grain passing this point (1).

Each State inspection staff consists of a sealer, an inspector and samplers. These men do their work as early in the morning as possible. First the sealer notes the car numbers, records the seals, breaks the seals and opens the car doors. Much emphasis is laid on keeping correct records of seals. The sealer notes any defects he may find in the condition of a car, especially leakage. He is followed by the sampler and inspector. The sampler works under special instructions and is particularly warned to watch for cars loaded with intent to get concealed grain of low grade past the inspector. Each car is probed at least seven times. The samples taken at the several probings are mixed on a cloth at the doorway and placed in a bag holding about three pounds. After the State sampler has left the car the Chamber of Commerce samplers enter it and take samples, but the two groups are under strict instructions not to perform this duty at the same time. The Chamber of Commerce samplers may not break the seal of a car. The car doors are closed and sealed by the State sealer who broke the seals and who keeps a careful record of them. The State samples are placed in locked boxes, each containing fifty of them, are loaded on express trains and are sent to the Inspection Department at Minneapolis. The box in which they arrive is left at the station and sent back to the sampling station, while the samples are taken from the trains to the inspection office by State employees. All such of them as are delivered before seven o'clock in the morning are inspected at once. The inspectors have no knowledge of the ownership of the grain. Every sample of wheat is sifted to determine the amount of foreign matter or *dockage* it contains, and the latter is expressed rather in pounds per bushel than as a percentage as at Winnipeg. As soon as they are graded the samples are returned to the sacks with the dockage, and the grades are entered, with the reasons for assigning them, on the tickets signed by the inspector. A complete record is kept of each ticket. The samples are kept for thirty-six hours or longer, in order that there may be ample time for reinspection and appeal, and the sample sacks are then sold, the profits going to the State Inspection fund.

B) The Work of the Chamber of Commerce.

The Chamber of Commerce samples are sent by the same express trains as the others to the various trains to which the cars are consigned, the sampling bureau having secured a list of the cars and their destinations. Both lots of samples arrive ahead of the cars of grain. On the large trading floor of the Minneapolis Chamber of Commerce there are tables, on which the samples received from the Chamber's sampling bureau are displayed in small tin pans. The samples have previously been examined by the ex-

(1) Only the grain originating between these points and Minneapolis or Duluth is sampled at the markets in the latter places.

perts of the various firms to which the cars are consigned. A card, giving the number of the car carrying the sampled grain and the place from which it came, is stuck in each pan. Sales are made on the basis of these samples.

In the meantime inspection lists are placed in the corridor of the inspection office, and all commission houses have access to them. If the commission house expert is not satisfied with the grade assigned to grain by the State he can demand reinspection, and if the result of this still does not satisfy him he can have recourse to the Appeal Board. If there is a discrepancy between the sample secured by the State samplers and that of the sampling bureau, resampling is ordered at once. Indeed resampling may be demanded in any case. This provides a check which reduces chances of incorrect grading to a minimum. When the commission firms have been informed of the grading of the cars, they attach the tickets showing grade to the pans in which their samples are displayed, and these act as a check and guide to trading. Most of the samples viewed before twelve o'clock in a morning are sold on the same day, and the disposition on the railroads of the cars, which have usually arrived, is ordered before four o'clock in the afternoon. The whole selling transactions have usually closed before the cars arrive, and cars are therefore switched without delay to the elevator or mill where they are to be unloaded, or onto the trucks which will take them to lake ports.

C) *The Functions of the Boards of Appeal.*

There are two boards of appeal in Minnesota, one at Duluth and the Minneapolis Grain Inspection Board at Minneapolis, and each of them consists of three members appointed by the governor of the State. These men have the same qualifications as the grain inspectors, and not more than two of them are of the same political party. Each member gives a bond of \$ 5,000 to the State. It will be noticed that while the Railroad and Warehouse Commission is elective the boards of appeal, which are quite independent of it, are appointed by the governor.

Any owners, consignees, consignors or warehousemen dissatisfied with grain inspection may appeal to the nearest grain inspection board. The fee for reinspection is \$1, refunded if the grade of the grain as to which there is appeal be changed. After such reinspection appeal may again be made to the board of appeal whose decision is final. For such second reinspection the fee is again \$1 which may be refunded as before. Most appeals concern wheat, and there are practically none as to barley the grades of which are so various that its value must be judged almost entirely from samples.

The following figures give some idea of the work done by these boards of appeal. They are for the year ended 31 August 1916.

	Receipts	Expenditure	Profit
Minneapolis. . .	\$ 28,701	\$ 11,130	\$ 17,570
Duluth	14,805	11,290	3,514

Changes in Grading.

	No. of Carloads on which there was Appeal	Grade Raised	Grade Lowered	Dockage Changed
Minneapolis.	33,212	2,580	1,033	899
Duluth.	17,446	2,349	185	170

The results expressed in terms of the percentage of the total number of cars on which appeal was made are as follows :

Decision	Minneapolis %	Duluth %
To raise grade	7.77	13.47
To lower grade.	3.11	1.06
To change dockage.	2.71	0.61
Total changes	13.59	15.14
Total not changed	86.41	84.86

The following table shows the percentage of the cars going to both markets of which reinspection was ordered and as to which appeals were made :

	Minneapolis and Duluth	Percentage
Total number of cars inspected.	445,105	
" " " " reinspected	64,628	14.5
Number of which grade was not changed after reinspection	50,353	11.3
Number of which grade was so changed. . .	14,275	3.2
Number as to which there were appeals. . .	50,658	11.3
Number of which grade was not changed after appeal	43,505	9.7
Number of which grade was so changed. . .	7,153	1.6

It is the object of the commission firms to get as much as possible for each carload, but all appeals are not made in the expectation of obtaining higher gradings. When a miller buys his grain from commission merchants and thinks it has been overgraded by the inspector, he may demand a rein-

spection or appeal to have its grade lowered, and he very frequently exercises this privilege. Consigners often give specific orders to commission merchants to demand reinspection if the car they are consigning is graded below a certain level. The millers and elevator men meet in competition for the grain, and hence there are many reinspections and appeals. Often inspection, reinspection and an appeal have all taken place before the car which has been sampled reaches the terminal market, so rapid are these operations.

The Minneapolis and Duluth Boards of Appeal have also other functions. They meet annually before 15 September and establish the grades of all grain subject to State inspection. These grades and the results of tests of them are published daily for one week in a newspaper in Minneapolis and in Duluth. All grain received at any public warehouse is graded according to these grades, which are not changed before the next annual meeting without the consent of at least five members of the board. Each board determines the grade and dockage of all grain in cases of appeals from the decisions of the chief deputy inspector, and may for such purpose ask to have fresh samples brought to it straight from the car concerned. It also helps and advises the chief grain inspector, enabling him to instruct the deputy inspectors of grain under his jurisdiction in accordance with the board's, decisions and work. It may recommend the Railroad and Warehouse Commission to discharge incompetent inspectors, and may make other reports and recommendations.

D) *The Official Sampler.*

In addition to the systems of checking we have mentioned there exists an "official sampler", established more than ten years ago by the Chamber of Commerce. This officer is an expert grain inspector of long experience. He has no connection whatever with the State inspection department but is the employee of the Chamber of Commerce. It is his duty to help to adjust disputes between members of this chamber. Thus when a carload of grain is sold on the sample market the buyer takes half the sample to check the grain in the car when it reaches the mill or elevator, and if the grain is not up to sample he appeals to the official sampler who takes a new sample from the car and compares it with that on which the sale was made. The decision of the official sampler is final.

*
* *

The organization which we have briefly analysed has made the business of selling grain extraordinarily rapid, putting an end to all the delays to which traffic was subject before the system of inspection was established. Before the sampling points were organized there were, during periods of

congestion, occasions on which more than a thousand cars of grain remained unopened in one railway yard after the morning sampling had taken place. Secondly the two agencies which mutually check each other and the possibility of appeal have caused the grading and the quality of the grain placed on the market to be such as to provide a firm basis for trade, and have eliminated most of the abuses due to bad faith and to the opposing interests of sellers and buyers.

The cost of sampling is negligible. The sampling bureau charges 20 cents for each sample at Minneapolis and 50 cents for each sample at Duluth, these rates having been raised from 15 cents and 40 cents, respectively. The fees of the State department for inspecting and weighing are 40 cents per car per thousand bushels for wheat, oats, barley, rye and speltz ; and 75 cents for flax seed and Indian corn.

FRANCE.

THE CONDITIONS OF RURAL LIFE IN 1913-1914.

OFFICIAL SOURCE :

DUCÉ DE BERNONVILLE (L.) : Enquête sur les conditions de la vie ouvrière et rurale en France en 1913-1914 (*Enquiry into the Conditions of Labouring and Rural Life in France in 1913-1914*) in *Bulletin de la Statistique générale de la France et du Service d'observation des prix*, vol. VI, Part III. Paris, April 1917.

In a preceding article (1) we resumed some facts interesting to agriculture discovered by the demographic and social enquiry, undertaken by the *Statistique générale* of France, into the position of the labouring and rural population in 1913-1914.

We have still to examine certain points included in this enquiry, notably the movement towards the depopulation of country districts and its causes, the phenomena of rural emigration, technical education for agricultural trades, and the incapacity due to health of rural labourers.

§ I. DEPOPULATION OF COUNTRY DISTRICTS.

The diminution in the population of French country districts is due to two causes: emigration into towns or abroad and the less number of large families.

The two question-forms used in the country — for families and for villages, respectively — provided frames in which certain numerical facts as to this double phenomenon could be collected. The form for villages asked that every person who had in 1911, 1912 and 1913 left a commune to settle elsewhere should be noted, together with his sex, age, trade and new address.

It will however be well, before we analyse the data obtained by means of the forms, to give some information as to the population of the places covered by the enquiry and their economic position.

(1) See our issue for July 1917, page 68.

Demographic and General Economic Conditions.

If the total number of inhabitants and the number of births in the 401 rural districts distributed among eight large regions (I) in 1881 and in 1911, respectively, be compared, it is discovered that in thirty years these districts have lost 9,000 out of 312,000 inhabitants or nearly 3 per cent. One hundred of them have however suffered an increase in their population, generally slight, it is true, but in several cases, especially in the regions of the north and east where prosperous industries have been established, considerable. If these latter cases be excluded, the depopulation will seem much more serious than the percentage we have given indicates. In fact, except in Brittany, there are no purely agricultural districts in which the number of inhabitants has increased. The total number of births was 7,966 or 255 per 10,000 inhabitants in 1881, and only 6,572 or 217 per 10,000 in 1911. The ratio is however superior to that arrived at for all France where the number of births per 10,000 inhabitants was 249 in 1881 and 187 in 1911. Thus in the whole country births diminished by 25 per cent., but in the observed districts only by 15 per cent. In Region VIII (West) the diminution was almost negligible, but in the south-east it was more than 25 per cent.

The following table shows the distribution of families in the observed districts according to the occupation of the head of each household. Of the whole number of families the percentage having a head whose pursuit is agricultural, whether he be a landowning or a tenant farmer, an agricultural labourer or a farm servant, is 54. In Region I (north) this percentage is only 38, in Region II (east) 42, in Region III (south-east) 53. In the other regions some two thirds of the heads of families are tillers of the soil. While in Region VI (Central Massif) and Regions IV and V (south) most of them own the land they cultivate, in the west they are mainly agricultural labourers or tenant farmers. In the villages of Region VIII (Brittany and Normandy) in particular more than a third of the total number of heads of families is made up of journeymen and other agricultural labourers and farm servants.

The families of tenant farmers, *métayers* and settlers constitute altogether one tenth of the total number — in the districts of the South-West Region, where *métayage* is common, as much as one fifth.

(1) These regions comprise the following departments: *Region I*: Nord, Oise, Seine-et-Oise, Somme. *Region II*: Ardennes, Meurthe-et-Moselle, Meuse, Vosges, Haute-Marne, Aube, Yonne, Côte-d'Or, Haute-Saône, Saône-et-Loire, Belfort. *Region III*: Ain, Doubs, Jura, Savoie, Haute-Savoie, Isère, Basses-Alpes, Hautes-Alpes. *Region IV*: Alpes-Maritimes, Var, Bouches-du-Rhône, Vaucluse, Ardèche, Gard, Drôme. *Region V*: Lot-et-Garonne, Gironde, Landes, Basse-Pyrénées, Haute-Garonne. *Region VI*: Corrèze, Aveyron, Lozère, Haute-Vienne, Creuse, Haute-Loire. *Region VII*: Charente, Indre-et-Loire, Loire, Loiret, Eure-et-Loire, Sarthe, Mayenne. *Region VIII*: Eure, Calvados, Orne, Seine-Inferieure, Côtes-du-Nord, Finistère, Morbihan.

TABLE I. — *Distribution in the Observed Districts of Families according to the Occupation of their Heads.*

Regions	Number of districts	Total number of families	Percentage of families whose head is						
			Non-farming landowner of independent means	Farming landowner	Tenant farmer, métayer or settler	Journeyman or other agricultural labourer farm servant	artisan or industrial worker	Tradesman	Man having other occupation
I	64	13,407	6.1	7.5	5.2	25.3	8.9	8.9	38.1
II	78	15,899	7.0	22.6	5.8	13.9	19.0	8.5	23.2
III	68	17,112	6.3	32.5	7.6	12.5	12.8	8.4	19.9
IV	20	7,021	6.5	39.1	8.9	17.9	13.4	6.1	8.1
V	30	4,558	4.8	35.5	20.0	13.2	14.2	5.1	7.2
VI	28	1,345	4.4	47.4	5.9	14.0	11.5	7.5	8.2
VII	51	11,373	11.1	21.0	16.4	27.8	8.2	8.5	7.0
VIII	89	16,395	7.2	11.5	14.3	36.8	7.0	9.0	14.4
Total . . .	428	87,170	7.1	22.3	10.0	21.8	11.7	8.3	18.8

To these figures, which are only approximate, most of the investigators have added their personal observations as to the chief changes which the last thirty years have brought to the economic situation in these districts. These observations can be resumed as follows : a large number of vineyards have disappeared and it has been possible to build them up again only partially and at great cost ; the cultivation of forage crops, stock farming, in some districts dairy farming, market-gardening and forestry have been considerably extended ; in general small rural industries have declined and in certain regions factories have arisen.

We will now distribute the facts obtained according to districts :

Region I (North). — Disappearance of the industrial colza and poppy crops ; decline in flax growing in the north. Considerable development of industry on a large scale. Small holdings tend to disappear and give place to large farms. General fall in value of farm-lands. Formation of pasture-lands. A certain number of rural industries still occupy part of the population of the villages of Oise, but the rural workpeople who once combined agricultural labour with industry have with some exceptions entirely given up tillage.

Region II (East). — Disappearance of many vineyards, some of which have been replaced by osier plantations (Ardennes and Meurthe-et-Moselle) and plantations of black-currant bushes (Cote-d'Or) and fruit-trees, and many by artificial meadows. Development of stock farming and progress of the dairy industry, especially in the Region of Belfort. There has been some parcelling of large properties, but at the same time a tendency to unite the parcels until their area allows of pasture-grounds and the profitable

employment of machinery. General fall in the price of land, which has, however, shown a tendency to cease of recent years. Decline of small local industries; the few occupations of this kind still followed are little remunerative and do not prevent the emigration of agricultural labourers. Industrialization of the region.

Region III (South-East). — Land of slight fertility, or lying in the mountainous districts unfavourable to the employment of machinery, is left fallow. Most of the destroyed vineyards have been replaced by artificial meadows. The keeping of milch-cows is very profitable in Jura and Doubs, especially in districts near the towns or industrial centres. The Gruyère cheese industry is making great progress. There is in certain districts of Upper Savoy a development of market-gardening, some of the products finding a market in Switzerland. The selling price of land had much decreased but has tended to rise of recent years. Small local industries are in full decline.

Region IV (South). — Disappearance of madder crops. Crisis in the cultivation of olive-trees owing to a disease of the tree and a fall in the price of the oil. Decline of silkworm rearing: mulberry-trees are being uprooted in many villages. Progress in the cultivation of forage plants and reconstitution of vineyards in Gard and Var. Land on slopes is left fallow, but where the climate allows market-gardening, the culture of early vegetables, table grapes and fruit of every kind has been much developed.

Region V (South-West). — Reconstitution of vineyards; development in stock farming and in the growing of fruit and early vegetables. Horse and sheep breeding has made much progress in Basses-Pyrénées. The production of sheep's milk for making Roquefort cheese is very profitable. In this department the price of land has tended to rise. Progressive disappearance of the charcoal-burning industry.

Region VI (Central Massif). — Vines are still grown on certain slopes. On the level land stock-farming and horticulture are more and more pursued. The dairy industry directed to the manufacture of Roquefort cheese is very prosperous in Aveyron. The lace-making industry, which is little remunerative, is localized in Haute-Loire. The price of land seems to have changed little in the villages of this district.

Region VII (West Central). — Formation of numerous artificial meadows; development of stock-farming and the dairy industry in Charente, where the emigration due to the viticultural crisis tends to decrease while the price of land, which had fallen considerably, is gradually rising. In Eure-et-Loire fallow land has disappeared and given place to beetroot, potato and forage crops; industrial dairies have been set up. The value of land is now increasing in many districts. Disappearance of small artisans. Partial reconstitution of vineyards and osier-plantations in Loiret; installation of sugar-refineries which have entailed a development of beetroot growing. Many grasslands formed in Sarthe, and large extension of early vegetable growing in Mans.

Region VIII (West). — Colza, buckwheat and rye crops gradually given up, and much arable land converted into pasture. Development of

horse breeding and selling and of market-gardening (artichokes and cauliflowers) in certain districts of Finistère. In many villages of Seine-Inférieure flax growing is at present very popular. A general tendency is noted to a fall in recent years of the price of land. Small farming is becoming important to the detriment of large farming: while tenants cannot be found for many large farms, the number of small farms is not sufficient to meet the demand and there is a tendency to parcel large properties. Small industries are disappearing. Important factories have been set up in Calvados.

§ 2. RURAL EMIGRATION.

The enquiry as to rural emigration was carried out with the help of the question-forms of which we have already spoken and which aimed at establishing how many persons had left a village under observation in order to settle elsewhere in 1911, 1912 and 1913, young men who left to serve in the army being excluded but not those of them who did not return after their period of military service. In this question-form one line was given up to each emigrant and in the case of each his date of departure, sex, age at departure, trade before departure, new place of residence (commune and department) and present trade were indicated. The facts culled from the information thus obtained have enabled the study of emigration in 429 districts which had altogether 344,636 inhabitants when the 1911 census was taken.

a) *General Data as to all the Emigrants.*

It was found that in the three years 1911, 1912 and 1913 a total of 7,545 persons had left these districts to settle elsewhere. Of this number 1847, or about a fourth, have been noted as following no trade when they left, more than half of them being less than twenty years old. In this category there are however a certain number of persons — especially women — who should rather be included in the agricultural, commercial or industrial group according to the trade of the respective heads of their families. The remaining 5,698 were grouped as follows in accordance with their trades:

	Total	Percentage
<i>Agriculture (including fishing and forestry)</i> . . .	2,003	25.2
Commerce, industry, transport	2,977	52.2
Professions and civil service	291	5.1
Domestic service	427	7.5
	<hr/> 5,698	<hr/> 100.0

Although the persons supported by agriculture form a majority of the total population of the districts reached by the enquiry, trades connected with commerce and industry are those which furnish the largest contingent of emigrants. It may even be said that, as far as numbers are concerned, agricultural labourers emigrate perceptibly less than others. The

masculine sex is notably predominant among the total number of emigrants. 3,584 persons, or slightly more than half the total number, were born in the commune they left; 2,333 in another commune of the same department; and 1,628 in another department. Of the 2,003 emigrants in the agricultural group 1,063 or 53 per cent. left their native communes. This percentage is lower in the groups of other trades.

It has been possible to classify 7,147 emigrants in accordance with their new addresses, those of 398 not being known. It is found that more than half (56.5 per cent.) of these persons have settled in another rural commune, most of them — more than four-fifths — in the same department. A very small fraction, 3.6 per cent., have gone abroad, and the others — two-fifths of the total number — have settled in towns. The proportion of emigrants who have transferred their residence to another rural commune is particularly high among cultivators — 61.1 per cent. They are principally tenant farmers, *métayers* and agricultural labourers, but include a few land-owning farmers who have sold their property to buy another and more extensive one in a district where the price of land is lower. The highest percentage of persons who have gone abroad, namely 5.5 per cent., is also found in the agricultural group. Outside the department of Seine the agriculturists who have settled in towns represent 24.8 per cent., within that department 8.6 per cent.

The enquiry also sought to determine the changes in the trades of emigrants which followed on their displacement. In the case of 448 persons no information could be obtained on this point. Of the 7,097 others the majority of the group having no trade remained thus. The figures referring to the agricultural group are as follows:

	Number	Percentage
Have kept their old trades	893	46.3
Follow another trade in the same group	101	5.2
Have changed their trade-group	805	41.8
Have no trade	129	6.7
	<hr/> 1,938	<hr/> 100.0

When these modifications were compared with those appearing in other trade groups it was found that persons belonging to the agricultural group have changed their trade most frequently. More than two-fifths of them have adopted new trades having no connection with agriculture.

b) *Emigration according to Regions.*

Out of the totality of 429 districts observed, which have 344,636 inhabitants, it has been found that 7,545 persons left in the three years considered, or 219 per 10,000 inhabitants. This proportion varies, however, with regions: in Region IV (South) it is 151 per 10,000, in Region VI (Central Massif) 446. From the point of view of depopulation it is not this proportion which should be considered, but that which refers only to emi-

gration abroad or to the department of Seine or a town in another department. From this point of view Region VI is the home of the most intense emigration — 273 per 10,000 inhabitants. Emigration works its ravages principally in the mountain villages; in some districts of the plain, where the fertility of the soil allows the development of stock farming and horticulture, it seems to have been partially arrested. Most of the emigrants go to Paris, whence, when they have got together a little nest-egg, they return to their native soil and buy land. Region V (South-West) stands second, especially the department of Basse-Pyrenees which is an important centre for the emigration of men to South America (138 per 10,000 inhabitants). Next to this comes Region III (Alps and South-East) in which the *arrondissement* of Barcelonnette supplies emigrants to Mexico (109 per 10,000 inhabitants). Emigration is of about equal importance in Regions II, IV, VII and VIII (respectively 87, 85, 75 and 85 per 10,000 inhabitants); and is feeble in Region I (North) — 54 per 10,000 inhabitants. We should add that in the north and Brittany a higher proportion of emigrants of all trades move from one commune to another than in the other regions. In Brittany these emigrants comprise a sufficiently high proportion of agricultural labourers who settle in another rural commune without changing their trade. It is noted in particular that a large share of those who go annually to Normandy or Beauce for the harvest do not return.

c) Causes of Rural Emigration.

In order to establish with certainty the chief causes of migratory movements it would be necessary to analyse in detail the position of emigrants in every region. The too restricted number of observations has not allowed this to be done in a way which is very instructive. The following are however the principal conclusions of the investigators on the subject.

If the determining cause of a rural exodus be taken to be a general desire for greater wellbeing, we have still to discover the various reasons which persuade emigrants that this desire cannot be realized in their own villages. We should first recall that it is not the agricultural callings which furnish the largest contingent of emigrants, but the trades connected with industry and commerce. The exodus of rural artisans is explained by the progressive disappearance of the small peasant industries, and this exodus represents a loss of labour to agriculture because a large part of the emigrating population alternated agricultural with industrial work.

As regards the purely agricultural population, a distinction should be made among the wage-earning labourers and the *métayers* and tenant and landowning farmers. The first of these categories furnishes by far the largest number of emigrants. It is the lack of hired labour which is everywhere the chief complaint of agriculture. Agricultural labourers transfer themselves for the sake of the higher wages paid in industry, the conveniences of town life, and the shorter working-days, passed under shelter. Farm servants, engaged by the year, do not suffer from unemployment, but on the whole their position on a farm is sufficiently miserable. They are in the

first place completely dependent on a master, and they cannot hope to have a family ; too often they are ill fed and above all ill lodged. In many Breton farms, for example, it is customary to make the farm servants sleep in shakedown in the stables, near the beasts.

The class of small landowning farmers also furnishes an appreciable if a far less contingent to rural emigration. In their case the movement, which was principally encouraged by the viticultural crisis and the bad prices generally obtained for products about 1900, seems to have been partly counteracted. According to declarations obtained from districts in various regions, it is to be concluded that hired agricultural labour continues to disappear, but that the emigration of those who can till the soil and remain independent has been to some extent arrested. In this connection an investigator of Côtes-du-Nord writes, " It is difficult to find tenants for large farms but there is a demand for small farms in excess of the supply. In this region several young farmers cannot find farms in which to establish themselves. It is the land which is lacking to labour willing to cultivate it, so long as the cultivation is done on the labourer's own behalf ".

Although moral and social causes noticeably influence rural emigration to towns, especially where women, who feel most strongly the attractions of urban life, are concerned, the economic causes for it predominate. So true is this that factories in country districts attract labour as much as those in large centres. Starting from this fact, the decentralization of the great industries has been advised with a view to lessening congestion in the large towns. It has also been recommended that agricultural credit be more widely afforded, especially to young married people who own land but lack capital with which to farm it. Redistribution with a view to a more profitable employment of machinery would also be most useful, as would the development of co-operation, not only in purchasing manures and implements, but also in using in common certain machinery and in selling produce. Finally a movement which has been evident for some years, and which the investigators notice everywhere to some extent, should be encouraged, the movement towards the intensive production of meat, milk and its derivatives, early vegetables and fruit.

d) *Reduction of Large Families.*

The rural exodus is really itself a natural consequence of the transformation of economic life. The persistently falling birth-rate of France has given to it a certain character of gravity.

The enquiry extended only to households the heads of which had been married for at least fifteen years when it was made. It discovered that of 2,128 of such families only fifty-eight or 2.7 per cent. were childless. The total number of children born to them was 10,752 or slightly more than five a family, and the number of children alive when the enquiry was made was slightly more than four a family. These figures are considerably higher than those referring to all French families.

Almost all the investigators declare the disappearance of large fami-

lies to be determined by the wish of husbands not to increase their expenses. They recognize that the laws for public relief (placing of assisted children in families) have alleviated much distress, but they are usually of opinion that these laws cannot influence the birth-rate. They give as another important cause for the fall in the birth-rate the fear of landowners to see their inheritance divided, and they ask for a modification in the Civil Code which would suppress the obligatory division of a man's property among his children and extend the right to bequeath.

§ 3. TECHNICAL EDUCATION.

There is a space on the families' question-form for indicating what children of a family are already at work and what trade they follow. It was found that 4,080 children were in places — 2,350 boys and 1,730 girls; but information as to their trades was furnished only in the case of 3,208 — 1,965 boys and 1,243 girls. In the case of many girls, in particular, only the word "married" was inserted without further indication.

The following table shows how many children were placed in trades of the various categories :

TABLE II. — *Number of Children Placed, according to Categories of Trades.*

Trade of head of family	Agriculture		Commerce and industry		Professions, civil service		Domestic service		Total	
	boys	girls	boys	girls	boys	girls	boys	girls	boys	girls
Landowning or tenant farmer, <i>métayer</i>	438	248	151	86	33	1	13	68	635	403
Agricultural labourer	222	105	66	55	11	3	7	51	306	214
Artisan, small tradesman	20	9	143	64	16	2	2	13	181	88
Workman	48	19	676	411	19	7	5	72	748	509
Employee	16	5	62	31	16	5	1	8	95	49
Total	714	386	1,098	647	95	18	28	212	1,965	1,263

The following percentages are found in families of each category :

TABLE III. — *Percentage of Children Placed according to Categories of Trades.*

Trade of child placed	Children belonging to families of									
	farmers		agricultural labourers		artisans, small tradesmen		industrial workers		employees	
	boys	girls	boys	girls	boys	girls	boys	girls	boys	girls
Agriculture	69.1	61.5	72.6	49.1	11.0	10.2	6.4	3.7	16.9	10.2
Ind. and commerce	23.7	21.4	21.5	25.7	79.1	72.7	90.4	80.7	65.5	63.3
Professions, civil ser- vice	5.2	0.2	3.6	1.4	8.8	2.3	2.5	1.4	16.9	10.2
Domestic service	2.0	16.9	2.3	23.8	1.1	14.3	0.7	14.2	0.7	16.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

The real significance of these percentages, which are based on absolute figures, relatively low, and leave out of account that considerable number of children whose trade is unknown, should be estimated with reserve. The enquiry has discovered, with this reservation, that about two thirds of the boys belonging to farmers' and agricultural labourers' families have remained in agriculture, while rather more than a fifth have entered industry or commerce, from 4 to 5 per cent. professions or the civil service, and only 2 per cent. domestic service. Where boys are concerned much the same proportions obtain in the families of agricultural labourers and of farmers, but as regards girls they differ noticeably. The families of journeymen labourers place a larger number of girls in industry and domestic service than do the families of farmers.

§ 4. DISABILITY IN THE AGRICULTURAL TRADES.

Information as to disability among the population of the observed districts was gathered during the enquiry. Every inhabitant was considered to be disabled if he suffered from "a physical or mental infirmity which placed him in a position of inferiority in relation to other inhabitants of his sex, age and trade". The enquiry on this point covered 453 districts grouping altogether 355,553 inhabitants according to the census of 1911. In all these districts 1,444 persons between thirteen and sixty years old were found to be suffering from physical or mental infirmity. The average was 53 infirm persons per 10,000 inhabitants. This figure comprises 675 persons infirm from birth (19 per 10,000) and 769 (22 per 10,000) whose infirmity was incurred after birth as the result of an illness, accident or other cause. These

769 persons were classified according to their occupations before they became infirm : 272 or 35 per cent. had no calling ; 273 had trades connected with commerce, industry or transport ; 168 or 22 per cent. were employed on agriculture ; ten belonged to the group of the professions and the civil service ; and 46 to that of domestic service.

Thus cases of disability are much less frequent in agriculture than in industry : the difference shown by our figures — that between 35 per cent. and 22 per cent. — would be yet more noticeable if the total number of disabled persons were compared with the total active population in each group. On the other hand disability seems to affect the material situation of the agricultural labourer most gravely, first because he does not enjoy the benefits of the law on accidents of labour, and secondly because he often suffers a considerable reduction in wages. On the whole disabled agriculturists change their occupation rarely ; but there are a certain number of them who have learnt a trade in which their infirmity is no drawback — clog-makers, shoemakers, tailors. These have been able to do this only because they had savings which made a time of waiting possible to them. Many disabled agriculturists become shepherds and cowmen and earn very low wages.

GREAT BRITAIN AND IRELAND.

SETTLEMENT OF EX-SERVICE MEN WITHIN THE EMPIRE AFTER THE WAR.

OFFICIAL SOURCES:

THE JOURNAL OF THE BOARD OF AGRICULTURE Vol. XXIV., No. 6, London, September 1917.
THE LABOUR GAZETTE, Vol. XXV, No. 9, London, September 1917.

The report of the committee appointed by the Secretary of State for the Colonies to consider the measures to be taken for settling ex-service men within the British Empire after the war has recently been issued. The terms of reference were: "To consider and report on the measures to be taken to settle within the empire ex-soldiers who may desire to emigrate after the war. To collect and prepare for distribution to intending emigrants of this class information which shall show clearly the nature of any facilities afforded by the governments of the dominions and States. To advise as to the best methods of making this information accessible to the troops. To make recommendations as to the steps which should be taken by His Majesty's Government, in concert with governments of the States and dominions, for the constitution of a central authority to supervise and assist such emigration".

The committee were informed that the term "ex-soldiers" included ex-service men from both the navy and the army and their wives and children. The committee felt themselves at liberty to consider also the case of widows and orphans of ex-service men and of women who, like nurses and munition workers, had done war work.

Evidence as to facilities for settlement on the land was taken from *a*) representatives of the overseas dominions, *b*) various bodies dealing with emigration, *c*) similar bodies dealing with settlement within the United Kingdom. The committee hold that there is no conflict between the opportunities offered at home and overseas, for both should have place in one great policy of settlement within the empire.

§ I. THE ESTABLISHMENT OF RELATIONS WITH THE TROOPS.

The committee hold that the proper time for distributing information as to opportunities for settlement among the troops is that which will elapse between the cessation of hostilities and the grants of furlough which will precede discharge.

The committee understand that the authorities contemplate issuing to each man, before demobilization, a form on which he will state *inter alia* his wishes as to future employment, and that demobilization committees will be appointed, in connection with the Employment Exchanges, to advise the men as to the various kinds of employment available.

The committee therefore suggest that :

1) The form which each man receives should enable him, if he so desire, to express his preference for employment in the oversea dominions of the empire ;

2) The names of all those who thus express such a preference should be sent for record, with all other relevant particulars concerning them, to the Central Emigration Authority to be constituted as stated below ;

3) The local demobilization committees, in order to advise men as to opportunities overseas, should be in direct correspondence with the Central Emigration Authority, which should issue the necessary literature and full instructions ; representatives of the Central Emigration Authority should visit these committees and attend as many of their meetings as possible ; wherever possible men well acquainted with oversea affairs should be nominated by the Central Authority as permanent members of the local committees.

§ 2. THE SETTLEMENT OF EX-SERVICE MEN AT HOME.

The existing schemes for the settlement on the land within Great Britain of discharged soldiers and sailors are on a small scale. They provide for the settlement of no more than 240 men or, if their wives and families be taken into account, of 1,200 persons. In addition general legislation has provided for all tillers of the soil by the guaranteed minimum price for wheat and oats from 1917 to 1922, and by guaranteeing a minimum wage of 25s a week to agricultural labourers (1).

The attention of the committee was mainly directed to emigration.

§ 3. THE CONSTITUTION OF A CENTRAL EMIGRATION AUTHORITY.

The committee lay stress upon the necessity for the prompt creation of a new Central Emigration Authority.

They make the following suggestions with regard to it :

1) It is undesirable to set up an authority, to deal with the emigration and settlement of ex-service men, which would be independent of any existing or prospective authority concerned with emigration generally ;

2) The oversea governments should be closely connected with the new authority ;

3) It should be in working order before the war is over ;

(1) See our issue for October 1917, page 67.

4) It should be so constituted as to be capable of carrying out any emigration policy on which the home government, in consultation with the oversea governments, may decide.

The committee recall that the Dominions Royal Commission recommended that a central authority should be set up as a department of the home government; and that a consultative board should be appointed, which should include representatives of the oversea dominions and others, and advise the new authority, securing the necessary co-operation between the home and oversea governments with regard to migration. The committee go further than the Royal Commission for they consider that the representatives of the oversea dominions should be connected with the new authority not in an advisory but in an executive capacity.

The committee propose that actual executive duties should be entrusted to a board for whose work a minister of the United Kingdom should be responsible. This minister must appoint the board's chairman, who should be able to devote his whole time to its work. Its other members should include one representative nominated by each of the following: the Colonial Office, the War Office, the Board of Trade, the Local Government Board, the Ministry of Labour, the governments of Canada, Australia, New Zealand and South Africa, one of the Agents General for the Australian States and one of the Agents General for the Canadian Province. The board should also have five unofficial members of whom two should be women.

§ 4. THE QUALIFICATIONS OF EMIGRANTS.

Emigrants should be qualified first by training or experience and secondly by the possession of capital.

The committee lay particular stress on the necessity of providing *training* for men who have not already had agricultural experience. They should generally receive their training in the place of emigration either on a training farm or similar institution or as labourers on a privately owned farm. During the period of training it will be impossible for their wives and families to live with them, and this justifies a postponement of the emigration of many women and children which will lessen the difficulties of transport. In some cases men who have been settled for a short time in a State or Dominion will be able to obtain reduced passages for their wives and families.

The committee recommend that if, as seems probable, the emigration overseas even of the men be delayed for a few months after the war by the lack of available transports, some knowledge of agricultural work should be given to them in Great Britain on the farms established or to be established by the Young Men's Christian Association, the Church Army and other public bodies. The committee attach considerable importance to the suggestion that the home government should provide soldiers, while they are awaiting demobilization, with instruction in carpentering, building and other crafts.

A TABLE ILLUSTRATING GOVERNMENT SCHEMES FOR SETTLEMENT OF EX-SERVICE MEN OVERSEAS.

Dominion or State.	Extent of Individual Grant.	Conditions.	Crops.	Government Loan.	Repayment.	Whether previous experience necessary.	Training.	Capital necessary.	Other Remarks.
CANADA— 1. Dominion Lands.	160 acres in Manitoba, Alberta, Saskatchewan	Free	Wheat, mixed farming.	£400 (1) maximum,	In 15 years at 5 per cent.	Yes . . .	Dominion Demonstration Farms or with approved farmers.	None . . .	Available also for widows of soldiers and sailors who have died on active service.
2. New Brunswick.	10-160 acres.	Cost governed by cost of improvements (clearing, well, house).	Dairy farming, fruit, potatoes.	£100-£300	10 per cent. on application, balance within 20 years.	Yes . . .	Demonstration Farms.	£100-£400 desirable	Community settlements to be established, accommodating from 100 to 250 families, with church, public hall, school, etc.
3. Nova Scotia.	Private farms for sale.	Cost from £120-£3,000.	Mixed farming, fruit, dairy farming, stock-raising.	Up to £500	Secured by mortgage.	Advisable.	Employment on farms.	£300 necessary.	Government will assist in choice of farm and employment in order to gain experience.
4. Quebec. . . .	Land offered in lots of 100 acres.	£6 per acre, payment within five years.	Heavily timbered land.	—	—	Yes . . .	—	—	Suitable only for native-born Canadians. Within 5 years settler must clear 15 acres, build house and put up a barn.
5. Ontario	160 acrs	Free, subject to conditions as to clearing, cultivation and residence.	Root crops and hay.	£100 . .	In 10 years at 6 per cent.	Yes . . .	Demonstration Farm at Monteth.	Not absolutely essential	Men without experience will be trained at Monteth Experimental Farm at a reasonable wage; and subsequently a farm colony will be established near one of the railways.
6. British Columbia.	Not yet fixed.	Pre-emption claim to land purchasable for £2.	Timbered. Fruit crops, mixed farming.	A fund to be provided.	—	—	—	—	—
AUSTRALIA— 1. New South Wales.	From 2 to 250 acres, average size 50	Rental 2 1/2 per cent. of capital value	Fruit and dairy and mixed farming.	1/2 of holder's interest.	When land becomes productive	Yes . . .	Govt. Farm at Griffith.	£50-£100 desirable	—

	of capital value, 6 per cent. per annum for 3 1/2 years.	Poultry farms, fruit, mixed farming.	£500 . . . Within 40 years at in- creasing rate of in- terest.	—	—	College at Dookie.	£300	No deposit and no rent for first three years. 60,000 acres already set apart and further acres as required and after construction of railways.
3. Queensland . .	Rent 1 1/2 per cent. of capital value (average 25s. per acre).	Wheat, fruit and grazing, acc. to dist.	Liberal advances promised	On easy terms.	Yes . . .	Farms com- prising simi- lar land.	Some capi- tal desi- rable in all cases.	Two large blocks of land N. of Adelaide, Mount Remar- kable and Mount Crawford estates set apart, suitable for wheat and grazing.
4. South Australia.	From a few acres upwards.	(i.) Wheat. (ii.) Fruit- growing, intensive cultivation	Loan from Agricultural Bank.	—	Yes . . .	Depots to be established at each set- tlement.	Some capi- tal desi- rable.	Men can usually find employ- ment on arrival and support themselves while acquiring experience.
5. Western Australia.	(i.) Payment of sur- vey fee and up to 840 acres at 15s. per acre. (ii.) Same terms.	Mixed farm- ing, fruit, mostly timbered.	£300 . . . Within 4 years.	Some ex- perience necessary	State Farm at Deloraine.	—	—	—
6. Tasmania . .	Men must have been previously resident in Tas- mania. By pur- chase or on lease	Provisions apply only to officers and men of the New Zealand forces and residents who have served in other contingents.	—	Indis- pens- able.	Preliminary training on the spot.	£1,000 . . .	Presence of native labour makes immigration of un- skilled labour impracticable.	—
NEW ZEALAND . .	Openings for sett- lers who will take up undeveloped irrigation hol- dings.	—	—	—	—	—	Main industries depend upon the fisheries, forests, and mines. Farming usually combined with some other occupation.	—
UNION OF SOUTH AFRICA	A limited scheme to be framed.	—	—	—	—	—	Some knowledge of horses, live stock, and handicrafts valuable. Openings for men who can direct the labour of others.	—
NEWFOUNDLAND . .	No special scheme at present.	—	—	—	—	—	—	—
RHODESIA	British S Africa Co. offers 500,000 acres.	Practically free of rent to men with requisite capital	—	—	—	Locally	About £1,000.	—

(1) The Dominion Government has also announced its intention of giving financial assistance to any approved settler on other than Dominion lands in any province of the Confederation.

Some *capital* will be necessary for emigration to almost every country in which the settlement of the soldiers and sailors is contemplated. The amount needed varies from a very small sum in the Prairie Provinces of Canada, Ontario and New Brunswick to £1,000 or £1,500 in the Union of South Africa and Rhodesia. In some cases the land is granted freely; and in most other cases payment for it is distributed over a number of years, varying from five — during which the settler must reside on his holding and clear 15 acres, building a house in the first eighteen months — in Quebec, to thirty in Australia. The oversea governments or the agricultural credit banks are ready to advance money for improvements at a moderate rate of interest; and suggestions for the expenditure of money by the home government in the form of advances of capital were considered by the committee. The amount of capital needed by an emigrant is thus smaller than at first sight appears.

A general consensus of opinion among witnesses before the committee was in favour of the preference of *married* men among the ex-soldiers and sailors for settlement overseas. The committee emphasize the need to facilitate the emigration of women relatives of these men, of widows and orphans of soldiers and sailors, and of other women who may be displaced after the war. They consider the emigration of women to be essential to all effective settlement of the empire; and go so far as to state that they consider grants of money enabling the emigration of wives, children, other women relatives and fiancées of the men to be more justified than grants which would help only themselves.

In every case the *oversea governments* must be satisfied that the immigrants to their territories are persons whom they are prepared to welcome.

§ 5. PLACES OF SETTLEMENT.

The preceding table shows the conditions offered to discharged soldiers and sailors settling in various parts of the empire.

MISCELLANEOUS INFORMATION RELATING TO AGRICULTURAL ECONOMY IN GENERAL, IN VARIOUS COUNTRIES.

ARGENTINE REPUBLIC.

THE LEASING OF THE DOMAIN LANDS. — *Boletín oficial de la República Argentina*,
No. 6916, 12 February. 1917.

A decree of the executive power, dated 8 May 1915, had modified the ruling for the public administration of the agricultural law (No. 4,167) of 8 November 1906, in that it authorized the domain lands to be let for a maximum term of twenty-five years (1). But a new decree, dated on the 7th of last February, has amended this provision, alleging that "the leasing of public lands, in large areas and for long terms, without any obligation on the lessee to populate them, to execute on them works making regular farming possible and to improve the soil, thus favouring agricultural progress, is contrary to the fundamental principles of a rational agricultural policy".

Consequently the decree of 8 November 1906 has been renewed in the territories in which it was applicable with the following special modification.

The available domain lands contemplated by law no. 5559 and such reserved lands as the executive power may determine are offered on lease without security of title, precedents to be carefully taken into account. Every tenant must pay in cash the costs of surveys already ordered on the lands offered on lease by the abrogated decree. Rents will be fixed by the Ministry of Agriculture in accordance with the productivity of the lands but must not be less than 200 pesos (2) a year for 2,500 hectares (3).

The maximum area which can be let to one person or society is 10,000 hectares in the territory of Pampa, Rio Negro, Neuquen, Chaco and Formosa, 20,000 hectares in that of Chubut and Santa Cruz.

If two or more persons apply at the same time for a lease of one lot, or if the general manager of the lands and colonies receive two or more applications for one lot, the applicants will be asked, before the matter is submitted to the ministry for determination, if they will consent to receive equal and equivalent shares of the lot. In default of their agreement it will be awarded to the person offering the highest rent.

In virtue of the decree of 1906 tenants of domain lands are bound to plant and preserve in a good state at least five useful trees for every 100 hec-

(1) According to article 50 of law no. 4167 the maximum term of a lease cannot exceed ten years.

(2) 1 peso = 48 at par.

(3) 1 hectare = 2.47 acres.

tares, unless the experts' report shows that their land does not lend itself to tree-growing.

Persons who have previously asked to occupy the lands for rents, without leases, on the terms of the decree of 8 May 1915, should within ninety days, if their applications have been approved by the executive power, declare that they are willing to conform to the provisions of the present decree. After the lapse of ninety days the lots of those of them who have not made such a declaration will be held to be free and can be let anew on terms fixed by the ministry.

The general manager of lands and colonization should be particularly vigilant that no lands are awarded to these tenants which are capable of being cultivated or forming a mixed farm by an application of articles 1 and 2 of the aforesaid agricultural law (1).

The domain lands in question can, in fact, be let only as pastureland.

A later decree, published in the *Boletín Oficial* for 2 April 1917, ordered an enquiry into the letting of domanial lands.

ITALY.

I. THE NEW MEASURES FOR THE PRESERVATION AND INCREASE OF THE NATIONAL PROPERTY IN WOODS. — *Gazzetta Ufficiale del Regno d'Italia*, Rome, no. 242, 13 October 1917.

In our issues for July and August 1911 we explained the fundamental principles of the new Italian forest legislation, which culminated in the law of 2 June 1910 (no. 277) instituting the State forest domain; and in our issues for September and October 1916 we examined the results obtained by preserving and reafforesting the woodlands. It has now been established by the decree of 4 October 1917 (no. 1065) that within a year of this date the Higher Council of Forests together with the Provincial Forest Committees must propose "the order and the mode of constituting" the forest domain in the various provinces of the kingdom. It is further provided that the following lands may be acquired and expropriated by the Ministry of Agriculture for incorporation in the State forest domain: a) the woodlands and lands to be reafforested, even if cultivated, if they are within the perimeter of the mountain basins to be systematized in execution of general and spe-

(1) These articles are as follows:

Art. 1. — The executive power will cause the domanial lands to be inspected in order to determine their conditions of irrigation, and [the possibility of utilizing them for agriculture, stock-farming, the realization of wealth in trees or forage and other industries, or of establishing villages and colonies on them.

Art. 2. — As gradually such examination and topographical survey are undertaken, the executive power will determine the mode of utilizing the various zones for the objects mentioned in the preceding article, districts suited to the foundation of villages and establishment of stock-farming colonies being reserved. These districts will be suitably divided into lots, their topography being taken into account.

cial laws ; b) parcels of land, even if cultivated, which are included in or adjacent to a State forest domain, if their incorporation in such domain be esteemed necessary to its economic organization ; c) lands, even if cultivated, the expropriation of which is esteemed necessary to the construction of roads of access and to the provision of sites for deposits or other conveniences necessary to the good management of a complex domain. The Ministry of Agriculture is authorized freely to afford technical direction, and to grant the necessary seeds and plants and premiums of from 50 to 300 liras a hectare, for optional re-afforestation and for restoring woods which have much deteriorated. Where an evident opportunity for them occurs the forest administration will also provide for the establishment on the spot of temporary nurseries for growing the shoots necessary to optional reafforestation. As soon as the premium has been paid the woods thus constituted will be subjected, if they are not so already, to the forest regime, that is to the effects of the law of 20 June 1877, no. 3917 (1). The mountain pasturages belonging to the communes and to bodies having an agricultural or moral character should be utilized according to the rules established in the regulations or, failing these, according to the rules prescribed by the forest committee. Such regulations ought in every case to be approved by the forest committee. Where such approval is lacking, or where there is dissension as to the rules contained in the regulation or prescribed by the forest committee, the question will be decided by the Minister of Agriculture after hearing the Higher Council of Forests.

Finally, when a mountain pasturage is owned in common by several proprietors the rules established for the administration and enjoyment of the common property and its improvement will bind even a dissenting minority, if these rules have obtained the approval of the numerical majority of the co-owners and if this majority also represent a majority of interests. Other provisions concern the management of communal woods and the improvement of pasturages.

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2. THE DEVELOPMENT OF IMPROVEMENTS IN THE SOUTH. — *Gazzetta Ufficiale del Regno d'Italia*, Rome no. 244, 16 October 1917.

The decree-law (no. 1597), dated 2 September 1917, as to "financial aid for works of improvement granted to the consortia and the development of improvements in Southern and Insular Italy" is of capital importance to national economy. The Deposit and Loans Fund will institute a special branch for granting this aid. It is authorized for ten years to grant to consortia who are concessionaries of works of improvement the loans needed for carrying out the programme of these works within the limits of a total sum of 150,000,000 liras. The sum corresponds exactly to

(1) See the articles already cited in *Bulletin des Institutions Economiques et Sociales* for July and August 1911.

the needs of the works already conceded or in course of being conceded. Such loans will be afforded gradually, according to the various lots of works indicated in the aforesaid programme; and with regard to the graduation of the loans only, the advice must be heard of a committee instituted at the Ministry of Public Works and composed of representatives of this ministry, of the Deposit and Loans Fund and of the Ministries of Agriculture and Labour. The Deposit and Loans Fund is authorized to anticipate in its loans made to consortia for improvements the sums necessary for beginning such works as are economically justified or entrusted to *co-operative societies of production and labour*. The decree-law provides further that the rate of interest to be paid out of the annual income of the State, the provinces and the communes shall no longer be fixed rigidly at 4 per cent. but shall be the rate established by the Deposit and Loans Fund for its ordinary loans.

In the case of the southern provinces and Sicily, where consortia for improvements are slow in arising and improvements have to be undertaken by the care of the State, the decree provides for a further increase of authorized funds up to 20,000,000 liras, to be added to those already authorized, and provides also for the speedier drawing up of technical plans.

Finally where improvements undertaken by the State are concerned the Ministry of Public Works in agreement with the Ministry of Agriculture may, in order to provide for agricultural improvement while the works are in course, nominate a special commission "to promote better co-ordination between hydraulic and agricultural improvements".

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3. THE CULTIVATION OF ABANDONED ARABLE LANDS. — *Gazzetta Ufficiale del Regno d'Italia*, Rome, no. 242, 13 October 1917.

A lieutenantcy decree of 4 October 1917 (no. 1614) establishes that the Ministry of Agriculture shall provide that lists be drawn up of arable lands abandoned by farmers and not directly cultivated by their owners in all those districts of the South and the Islands in which the abandonment of arable lands has assumed notable proportions. The Minister of Agriculture is authorized to grant fit compensation for the cultivation of these lands in the first two years. He will invite their owners to present requests within fifteen days. If an owner do not present such a request, or if when he has presented it he do not begin or continue the works within the prescribed term, the minister may proceed temporarily to occupy the land for a period of no more than nine years. In this case the State will pay a postponed annual indemnity to the owner. Such lands can be ceded by the minister to managers or cultivators or public bodies offering the necessary technical guarantees of their farming.

Disputes as to the application of this decree will be decided, on the appeal of those interested, by the Minister of Agriculture, who will issue a decree, adducing his reasons for it, after hearing the advice of the relevant

commission. There is no appeal from the minister's decision on either administrative or legal points.

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4. THE TECHNICAL EDUCATION OF PEASANTS. — *Gazzetta Ufficiale del Regno d'Italia*
Rome, no. 240, 11 October 1917.

Among recent decrees for the encouragement of agriculture one dated 9 September 1917 (no. 1595), which provides for the technical education of adult peasants, should be mentioned. It provides that in every province the provincial commission of agriculture shall arrange for the organization of such education. Executive duties and instruction are entrusted to an *ad hoc* committee of three or five members to be nominated within this commission. Such committee will comprise the director of the ambulant chair of agriculture or his substitute who will be secretary-reporter, and if the directors of the provincial institutions of agricultural education do not belong to the committee they will be added to it. In order to perform its task, as we have defined it, the provincial commission, bearing in mind the needs of agriculture, will employ the following means: *a*) temporary practical courses on local crops; *b*) temporary practical courses on agricultural industries; *c*) temporary courses on the use of agricultural machinery; *d*) temporary courses on the practice of rural and forest industries; *e*) temporary courses for women on domestic economy and agricultural industries; *f*) practising periods in farms or other establishments. The provincial commission can further use other direct or indirect means suited to its end. The supervision of the technical education of adult peasants belongs to the Ministry of Agriculture.

NOTICES RELATING TO AGRICULTURAL ECONOMY IN GENERAL IN VARIOUS COUNTRIES.

ITALY.

AVANZI (Dr. E.): *Influenza che il protezionismo ha spiegato sul progresso agrario in Italia* (*The Influence Exercised by Protection on Agriculture in Italy*). Enrico Spoerri, Pisa, 1917.

In this laudable study the author, after protesting that he does not pretend to have solved so complex a problem, affirms that the influence exercised by protection can be circumscribed by sufficiently well determined limits. From the data he has collected and the observations he has made it seems to him particularly difficult to protect agriculture and encourage Italian agricultural progress by imposing protective duties. In practice "while the direct influence of agricultural protection is subject to a large number of circumstances which tend to diminish its efficacy, its indirect influence, which is as a rule injurious, tends to increase more and more as it persists". At present agricultural progress is taking place largely outside the circle of protected agriculture: thus many admirable examples are to be found of the intensive culture of flowers, greens, fruit-bearing plants, etc.; and in the case of these protection is simply an indirect obstacle to commercial expansion. Crops of this kind afford examples of progress and of retrogression, whether or not they are protected. The direct influence of protection affects almost exclusively winter grain crops and rice; other crops — especially vines, olives and oranges and lemons — need a commercial policy of expansion. Dr. Avanzi reaches the conclusion that the protection granted to Italian agricultural products might be gradually reduced.

UNITED STATES.

STEWART (C. L.): *LAND TENURE IN THE UNITED STATES WITH SPECIAL REFERENCE TO ILLINOIS* (*Univ. Illinois Studies Soc. Sci.*, 5 (1916), No. 3, pp. 135, figs. 22).

The author discusses in general the situation regarding land tenure in the United States as a whole, and conditions in Illinois in detail. Among his conclusions are the following:

"It appears that the forms of tenure have been phases accompanying, limited by, and modifying the conditions and changes in the agricultural economy of the State. The prevalence, sectional character, and growth of

farming by tenant operators is chiefly governed by the real value of the shares of the owners and tenants in the surplus of operation. Tenancy forms a sort of cumulative index of the effectiveness of the desire of the owners to escape the operation of their land, and of the ineffectiveness of the desire of tenants to become owners.

"Share tenancy has been more prevalent than cash tenancy, though cash tenancy predominates in the northern part of the State and has been more characteristic of tenants who were advanced in years and who were operating farms whose owners were resident at a considerable distance from their farms...

"The farms of no single form of tenure can be held to be superior in all ways. Managed farms had the highest value in buildings and live stock per acre, and farms of owners were characterized by the highest value of implements and machinery per acre. In values of domestic animals the farms of tenants were below the average when either the total value or the value per head is considered. The farms of tenants were largely devoted to the production of the money crops. This was particularly true of share tenant farms. Yields were superior in the case of farms operated by managers and by cash tenants...

"It was shown by the age statistics that young operators were more generally characterized by tenancy especially on the share basis, and that young owners were most heavily encumbered. Advancing years tended to replace share with cash tenancy, tenancy with ownership, and encumbrance with freedom from mortgage debt. The latest census data, however, indicate that an influence is at work restraining this movement...

"Farming efficiency in the future will probably consist to a greater extent in the ability to increase net profits through cooperative dealing with the market. The efficiency test must, therefore, rule more strongly against operators of the tenures whose characteristics are opposed to successful co-operative efforts on their part.

"It is not necessary, however, that the farmers of other tenures operate as efficiently as the owners themselves would operate. If owners prefer to have their land operated by others than themselves, and if their holdings are sufficiently large, they may content themselves with the financial disadvantage resulting from their refusal to operate their own land...

"The test of productive efficiency may be somewhat slow in acting and costly but it bids fair in the long run to penalize unsound farming regardless of the tenure of the operators, and to guarantee, therefore, the survival of the best forms of tenure and of the best individual operators".



(c) Publications of the Bureau of Agricultural Intelligence and Plant Diseases.

1. **L'E SERVICE DE PROTECTION CONTRE LES MALADIES DES PLANTES ET LES INSECTES NUISIBLES DANS LES DIVERS PAYS** (The Present Organization of the Services for the Control of Plant Diseases and Insect Pests in the Different Countries). (1914, 350 pages, 4to) Frs. 4.00
2. **PRODUCTION ET CONSOMMATION DES ENGRAIS CHIMIQUES DANS LE MONDE** (Production and Consumption of Chemical Manures in the World). (Second Edition, 1914, 162 pages, 5 diagrams, 2 maps, 8vo) " 3.50
3. **LA LUTTE CONTRE LES SAUTERELLES DANS LES DIVERS PAYS** (The Campaign against Locusts in Various Regions) (1916, 188 pages, 8vo) " 3.50

(d) Publications of the Bureau of Economic and Social Intelligence.

1. **L'ACTIVITÉ DE L'INSTITUT INTERNATIONAL D'AGRICULTURE DANS LE DOMAINE DE LA COOPÉRATION, DE L'ASSURANCE ET DU CRÉDIT AGRICOLES** (The Work of the International Institute of Agriculture in the Field of Agricultural Co-operation, Insurance and Credit). (In French, German and Italian). (1912, 34 pages, 8vo) " 0.50
2. **MONOGRAPHES ON AGRICULTURAL CO-OPERATION IN VARIOUS COUNTRIES, Vol. I.** (1911, 451 pages, 16mo). (In English and French) " 3.50
Do. Vol. II. (1915, 213 pages, 8vo). (In English and French) " 3.50
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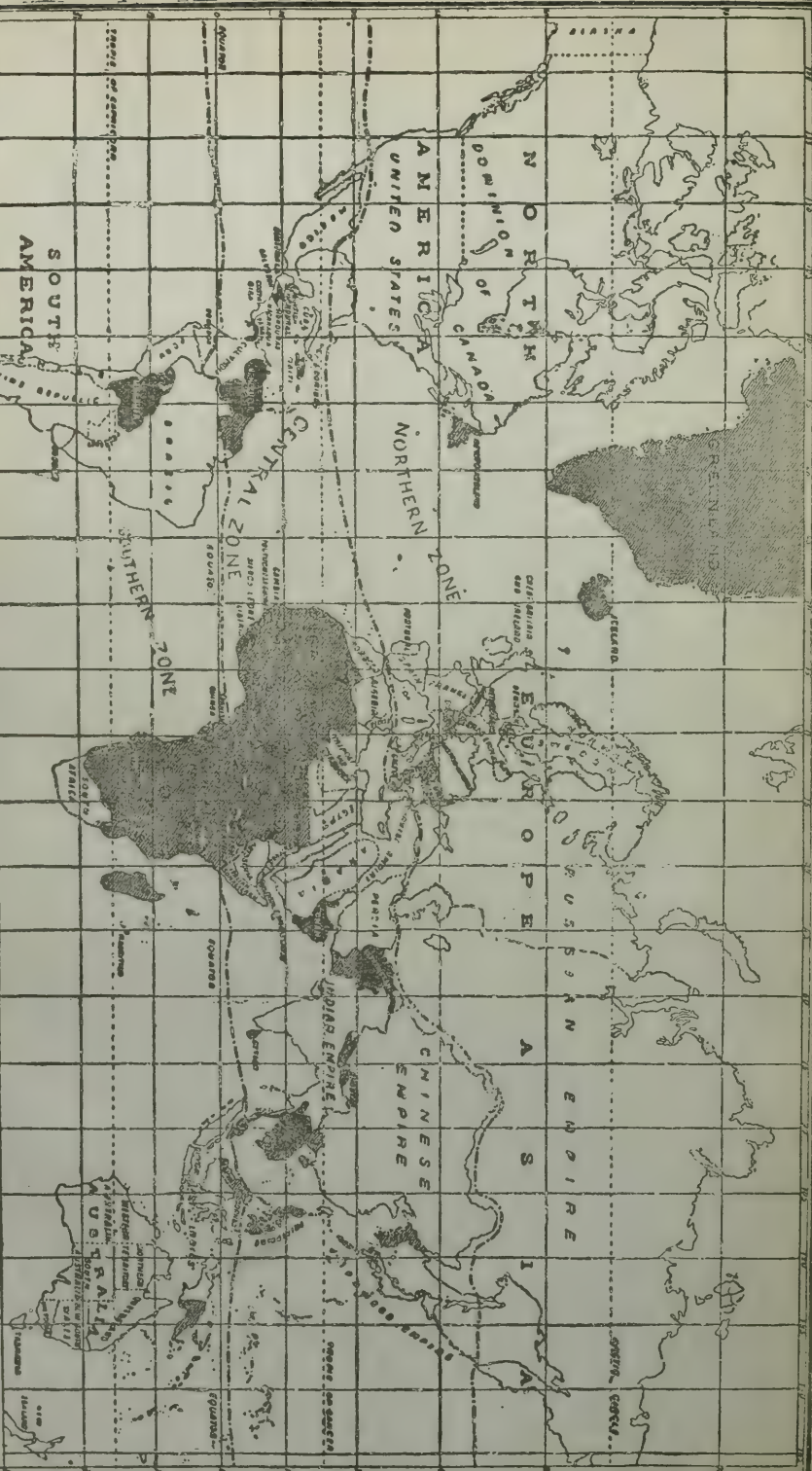
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INTERNATIONAL INSTITUTE OF AGRICULTURE
BUREAU OF ECONOMIC AND SOCIAL INTELLIGENCE

INTERNATIONAL REVIEW
OF AGRICULTURAL ECONOMICS

(MONTHLY BULLETIN OF ECONOMIC
AND SOCIAL INTELLIGENCE)

VOLUME LXXXIV.
8TH. YEAR: NUMBER 12
DECEMBER, 1917.



ROME
PRINTING OFFICE OF THE INSTITUTE
1917

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Part I: Co-operation and Association

GERMANY.

THE "LANDSCHAFT" OF POSEN FROM 1 JANUARY 1914
TO 1 JANUARY 1916.

SOURCES :

VERWALTUNGSBERICHT DER KÖNIGLICHEN DIREKTION DER POSENER LANDSCHAFT BETREFFEND DAS JAHR 1914 NEBST DEN VERHANDLUNGEN DES ENGEREN AUSSCHUSSES DER POSENER LANDSCHAFT VOM JUNI 1915. Ostdeutsche Buchdruckerei und Verlagsanstalt, A. G. Posen, 1915, 86 pp.

VERWALTUNGSBERICHT DER KÖNIGLICHEN DIREKTION DER POSENER LANDSCHAFT BETREFFEND DAS JAHR 1915 NEBST DEN VERHANDLUNGEN DES ENGEREN AUSSCHUSSES DER POSENER LANDSCHAFT VOM 27 APRIL 1916. *ibid.* 57 pp.

The importance of the *Landschaft* of Posen, from the point of view of land and agriculture, is certainly not new to the readers of this Review who have been able more than once to acquire information as to its methods of working and activity. We need not therefore insist on the value of the data in the two publications cited at the head of this article, which enable us to analyse the reports for 1914 and 1915 of the administration of the *Königliche Direktion der Landschaft* and those of the committee and of the Bank of the *Landschaft* with the remarks of the commissioners of accounts and the schemes for a budget. The elements thus collected are instructive and allow us to apprehend the complete vitality of this movement.

The *Landschaften* are, as will be remembered, societies which grant to landowners within their respective spheres of activity loans secured by the value of their properties. The amount of the loan granted is represented by bonds and negotiable titles to land issued from year to year at varying rates of interest, at from 3 to 4 per cent. in the case of the society with which we are now concerned. The bearers of the titles issued in one year form within the society a small association, for each of these groups of titles is subject to the same rules as to the amortization of the sums borrowed. A special bank, called the *Landschaftliche Bank*, undertakes the purely financial work of the *Landschaft*. In certain cases, when a borrower cannot meet his engagements, the society undertakes the administration of the property representing the value of the debt contracted, and sometimes proceeds to sell all or part of the pledged lands. These are the essential features of the

methods of the *Landschaften* in general and the *Landschaft* of Posen in particular. We have thought it well to recal them briefly.

*
* *

Since 1867 the business of the *Landschaft* of Posen has followed the regular course which characterizes a sound institution. From year to year it has improved its total operations. In 1913 and up to the time of the outbreak of war it was planning to use for paying life insurance premiums, to the profit of those borrowing on land, the amount of the amortization funds of its new 3 ½ and 4 per cent. titles, but events did not allow this measure to be carried out: its execution will probably have to be postponed until after the conclusion of peace. We should note however with regard to another question, that the increasing of the funds owned in its own right by the *Landschaft*, which was the object of a proposal by the committee of internal administration in 1914, was decided in 1915. It was resolved that after the war ended, as soon the bill exchanges should reopen, these funds would receive an addition of 750,000 marks from the balance of the Bank of the *Landschaft*, and thus the latter would also be enabled to increase the amount of its loans.

Meanwhile contracts for loans covered, in the first half of 1914, 9,624,600 marks of bills on the old system. The issue of these was stopped on 31 May and business was done with the new titles at 3 ½ and 4 per cent. As will be seen from the few following figures the latter titles have the preference. The loans were divided between the two kinds of titles as follows:

In new bills - 4 per cent :		30,239,400 marks
that is : 1st half	20,160,000 marks	
2nd half	10,078,800	»
In new bills - 3 ½ per cent		100,700 »
that is : 1st half	45,800	»
2nd half	54,800	»
	giving a total of	30,340,100 »

which, added to 9,624,600 marks of titles on the old system, gives for 1914 a total of 39,964,700 marks of bills placed. In 1915 the corresponding transactions reached 6,199,300 marks. This means that business was limited to supplying the strictly necessary demand for credit, and the reports for 1914 and 1915 concur to prove that such will be the case while the war lasts.

The market price of new 4 per cent. titles passed from 91.80 per cent. to 94.30 per cent. on 1 May 1914. It was quoted as 94.40 per cent. on 15 July, then sank slightly while the outbreak of war was expected daily, and finally stopped on 29 July at 93 per cent. As regards the new 3 ½ per cent. titles business during the war has been too slight to make the subject of a quotation on the market.

*
* *

1914 was the twenty-fifth year in which the Landschaft of Posen had been active since it had founded a special fund for loans on land, the *Posener landschaftliche Darlehenskasse*. It had already become one of the chief financial establishments in the province. In these twenty-five years it succeeded in repaying 2,000,000 marks of its foundation capital on which it also paid interest at the rate of 3 per cent. This repayment had been accomplished at the beginning of 1911. From then until the end of 1914 the Landschaft realized a profit balance of 1,247,344.30 marks. Moreover while it was making repayments it constituted a reserve fund of 1,000,000 marks, the limit anticipated by the by-laws.

The following figures allow of a comparison of its turnover for three years.

Turnover in	1913	405,709,849.59	marks
" "	1914	515,494,023.89	"
" "	1915	498,052,288.82	"

The net profits in these three years were as follows :

Net profits in	1913	343,332.96	marks
" " "	1914	408,355.55	"
" " "	1915	392,022.84	"

These represent, respectively, 11.44, 11.85 and 13.06 per cent. of the 3,000,000 marks of capital engaged. In conformity with § 11 of the by-laws of the Bank of the Landschaft of Posen, dated 24 February 1890, the total amount of these profits is paid into the funds held in its own right by the Landschaft.

These figures are the more significant because they represent definite results. They are evidently the final point of a quantity of operations bearing on the titles of the Landschaft. The two reports which we are examining are a detailed exposition of the transformations and renewals of the various categories of titles issued. If we abstract for each category the exact sum of the amount of the transactions really added to those of preceding years, we will obtain a sufficiently clear picture of the progress of the Landschaft.

I. The situation of new investments of 1914 was as follows :

a) in 3 ½ % bills (without letter)	2,347,700
b) in 3 ½ % bills assigned to the fourth sixth of the letter C. titles	1,045,000
c) in 4 % bills letter D	3,311,200
d) in 4 % bills assigned to the fourth sixth of the letter E titles	1,289,000
e) in new 3 ½ % bills	100,700
f) in new 4 % bills	7,851,700
giving a total of	<u>15,945,300</u>

whence must be deducted :

for disburdening 75 properties or parcels of such, partial extinctions	2,960,200
---	-----------

which gives the net figure of	12,985,100
---	------------

The corresponding position in 1915 was as follows :

a) in new 3 ½ % bills	10,000
b) in new 4 % bills	3,571,200

giving a total of	3,581,200
-----------------------------	-----------

whence must be deducted :

for disburdening 28 properties or parcels of such, partial extinctions	2,615,500
---	-----------

which gives the net figure of	965,700
---	---------

II. The detailed position with regard to titles bearing interest at the end of 1914 was as follows :

bills of the annual associations	4 %	9,447,900
» » » » »	3 ½ % (without letter)	194,337,900
» » » » »	3 ½ % (letter C)	35,663,300
» » » (letter A)	3 %	4,077,200
» » » (letter B)	3 %	965,300
» » » (letter D)	4 %	103,925,400
» » » (letter E)	4 %	37,741,900
new bills	3 ½ %	125,700
» »	3 ½ %	37,138,600

giving a total of	423,423,200
-----------------------------	-------------

whence must be deducted the total amount of amortizations including extinctions on 2 January 1915	27,217,900
--	------------

which gives a net amount of	396,205,300
---------------------------------------	-------------

to reach the amount of titles in circulation on 31 December 1914 the value of those paid into reserve and guaran- tee funds must be taken into account	21,351,700
--	------------

thus the bills in circulation at this date represent	374,853,600
--	-------------

The corresponding position in 1915 was as follows :

bills of annual associations	4 %	7,811,000
» » » (without letter)	3 ½ %	192,014,400
» » » (letter C)	3 ½ %	35,421,000
» » (letter A)	3 %	4,053,400
» » (letter B)	3 %	734,200
» » (letter D)	4 %	103,092,600
» » (letter E)	4 %	37,267,100
New bills	3 ½ %	135,700
» » 	4 %	43,291,500

giving a total of . . . 423,820,900

whence must be deducted the total amount of amortizations
including extinctions on 2 January 1916 28,533,400

which gives a net amount of . . . 395,287,500

to reach the amount of titles in circulation at the end of
1915 the value of those paid into reserve and guaran-
tee funds must be taken into account 22,297,700

thus the bills in circulation at this date represent . . . 372,989,800

*
* * *

The account of the funds belonging to the Landschaft
in its own right shows at the end of 1914 for 3 ½ %
bills (without letter) 1,280,000
in coin 399,805.69

at the end of 1915 the fund of 3 ½ % titles was un-
changed 1,280,000
we must add - in coin 49,134.98
and a nominal amount of 800,000
subscription to war loan 1915
and a nominal amount of 400,000
subscription to war loan 1916
funds supplied by profits of years 1913-1914 and 1915 . .

In 1914 and 1915 no property securing a loan was sequestered. In 1914, on the other hand, proceedings for sales by auction were entered into in connection with 46 properties :

a) at the request of the Landschaft in the case of the following properties :

Boruschin	no. 17	District of	Obornik,	having area of	12.78 hectares
Königsruh	no. 9	"	"	"	24.48 "
Schwarzshauland	no. 5	"	"	"	11.42 "
Turowy		"	Pleschen,	"	195.99 "
Bolechow	no. 38	"	Posen-Ost,	"	154.97 "
Kobelnitz	no. 14	"	"	"	15.47 "
Grünweiler	no. 8	"	Rawitsch,	"	10.33 "
Biernatki	no. 9	"	Schrimm,	"	16.10 "
Jaskulki		"	"	"	268.20 "
Lindenhain	no. 12	"	"	"	13.82 "
Xienginki	no. 12	"	"	"	10.49 "
Wodzisko	no. 2	"	Wreschen,	"	53.63 "
Netzort	no. 177	"	Bromberg,	"	9.77 "
Nikelskowo	no. 41	"	Kolmar,	"	10.35 "
Skubarczewo	Rgt.	"	Mogilno,	"	255.71 "
Wolwark	no. 81	"	Schubin,	"	17.66 "
Blumendorf	no. 1	"	Strelno,	"	23.20 "
Grosssee	no. 84	"	"	"	10.22 "
Kleinsee	no. 24	"	"	"	48.53 "
Lugi	no. 2	"	Wilkowo,	"	69.69 "
Schwarzenau	no. 22	"	"	"	21.40 "
Grüne	no. 25	"	Lissa,	"	22.03 "
Birkenbruch	no. 18	"	Wirsitz,	"	14.16 "
Chlewo	no. 32	"	Schildberg,	"	9.10 "
Drewno	no. 18	"	Zuin,	"	74.20 "

b) at the request of other creditors in the case of the following properties:

Nieder-Alt-Driebitz		District of	Fraustadt,	having area of	314.60 hectares
Briesen	no. 1	"	Obornik,	"	129.89 "
Duschnik	no. 196	"	Samter,	"	11.62 "
Rohrwiese	no. 6	"	Schrimm,	"	20.23 "
Landau	no. 17	"	Schroda,	"	17.99 "
Otoczno	no. 22	"	Wreschen,	"	24.57 "
Grocholl	no. 15	"	Bromberg	"	8.15 "
Romanshof, O.G.	no. 78	"	Czarnikau	"	7.62 "
Steinbornsgut	Ant. II.	"	Filehne	"	41.72 "
Schönbrunn	no. 25	"	Gnesen,	"	103.51 "
Penchowo	no. 31	"	Hohensalza	"	8.80 "
Schneidemühl	no. 400	"	Kolmar	"	118.63 "
Wilsbach	no. 4	"	"	"	109.46 "
Zendowo	no. 19	"	Schubin	"	29.83 "
Fünfhöfen	no. 4	"	Strelno	"	192.69 "
Rudki Lgt.		"	Obornik,	"	245.56 "
Lobendorf	no. 9	"	Schroda,	"	11.08 "
Skarbozewo	no. 20	"	Wreschen	"	23.57 "
Blumendorf	no. 10	"	Strelno	"	34.85 "
Gromaden	no. 61	"	Schubin	"	26.07 "
Grosssee	no. 79	"	Strelno	"	23.04 "

In 1915 proceedings for sales by auction were entered into in the case of 60 properties, at the request of the Landschaft in that of 25 and at the request of other creditors in that of 35. The report of the Landschaft for that year gives no details as to area.

*
* *

At the end of 1914 the following properties guaranteed loans which had been made:

a) 4,559 holdings, each containing land worth 15,000 marks or more, having a total area of 947,186 hectares and securing loans amounting to 393,914,900 marks.

b) 5,598 holdings, each containing land worth at least 15,000 marks, having a total area of 94,891 hectares and securing loans amounting to 29,508,300 marks.

The corresponding figures for 1915 are as follows:

a) 5,575 holdings, each containing land worth 15,000 marks or more, having a total area of 933,187 hectares and securing loans amounting to 394,038,500 marks.

b) 5,663 holdings, each containing land worth at least 15,000 marks, having a total area of 95,781 hectares and securing loans amounting to 29,782,400 marks.

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At the end of 1914 the report on forestry gave data as to 40 holdings having a total area of 20,901 hectares of woodland and worth altogether 11,977,300 marks. This value, calculated as additional to that of the soil only, gives an average of 546 marks a hectare. Of the 40 holdings, 27, having a total area of 16,863 hectares and worth as security 9,363,900 marks, could profit by a supplementary loan; but a domain of 317 hectares of forest land, worth as security 127,600 marks, was debarred from the grant of such a supplement.

The only modification in this connection in 1915 consisted in granting the supplementary loan to 28 properties, having a total area of 17,583 hectares of forest land, worth as security 9,817,300 marks.

In 1914 the Landschaft dealt with 18,827 transactions; in 1915 with 11,933.

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To complete the data from the report of the Landschaft we give those which refer to the bank on 31 December of the three years 1913, 1914 and 1915.

In hand. — 1913: 416,439.16 marks — 1914: 514,648.77 marks — 1915: 234,812.26 marks.

Current account. — 1913: 3,895,575.84 marks — 1914: 6,774,486.70 marks — 1915: 8,156.62 marks.

Account of Lombards. — 1913: 137,500 marks — 1914: 312,600 marks — 1915: the figures are wanting.

Deposit account. — 1913: 1,858,717.82 marks — 1914: 2,669,589.68 marks — 1915: 2,435,151.50 marks.

Advance account. — 1913: 5,087,193.92 marks — 1914: 4,624,821.29 marks — 1915: 7,987,380.21 marks.

Bill accounts. — 1913: 2,300,311.89 marks — 1914: 5,436,679.32 marks — 1915: 3,959,005.83 marks.

Account of bills to be received. — 1913: 1,126,970.14 marks — 1914: 993,962.82 marks — 1915: 1,009,722.65 marks.

Commission account. — 1913: 136,151.46 marks — 1914: 61,109.98 marks.

Interest account. — 1913: 221,592.53 marks — 1914: 334,189.91 marks

The costs of administration which were anticipated at 145,646 marks were only 142,380.49 marks in 1914. In 1915 they were anticipated at 172,446.50 marks and 166,167.43 marks were actually spent.

MISCELLANEOUS INFORMATION RELATING TO CO-OPERATION AND ASSOCIATION IN VARIOUS COUNTRIES.

GREAT BRITAIN AND IRELAND.

CO-OPERATIVE FISHING IN THE ARAN ISLANDS. -- *Better Business*, Vol. III, No. 1,
Dublin, November. 1917.

A. *Foundation*. — The Aran Islands are situated in the centre of Galway Bay, about thirty miles due west of the town of Galway and equidistant from the coasts of Clare and Galway by about ten miles. In 1891 they were bought from the landlords by the Congested Districts Board. In September 1915 the Aran Co-operative Fishing Company was organized by the Irish Agricultural Organization Society at Kilmurvey, a small village in Inishmore, the northern island of the group. The office and headquarters of the society were established in a little curing store, rented, together with the curing apparatus, from the Congested Districts Board for £2. 1s. 0d. a year. The society then obtained from this board a loan of £150 in cash and a loan of stock, consisting of salt and barrels, of the value of £150. To allow the accumulation of sufficient working capital members agreed to forego all payment for their fish for about six weeks, that is until the cured fish had been sold, when they would be paid in full for all they had supplied.

B. *Formation of Share Capital*. — Every member must on joining the society pay an entrance fee of sixpence and one shilling towards the purchase of one share of £1. The balance of their shares is paid for by members by deductions of one shilling in the pound from all payments made to them for their fish. When each of them has thus bought one share the society can continue to make similar deductions until the total amount deducted provides a capital equal to its needs. The deductions are credited to the share account of each member as shares or in part payment of shares. The committee has power to decide what number of shares shall be held by a member. Thus a member's interest in the society increases automatically in proportion to his participation in the society's trade — an ideal state of affairs.

C. *The Co-operative Supply of Fish*. — By the important rule known as the Binding Rule the society and its individual members are mutually bound, the society to buy all the fish which a member has to sell, the member to sell to the society all the fish he catches. The obligation is limited to the fishing season, of which the committee determines the exact duration. On the society's side it is further limited by the proviso that the fish be delivered in good condition and at times warranted by market conditions and rendered possible by the custom of the trade, and that such fish

be suitable for sale under the brand or brands authorized by the society. Due provision must be made, before paying for fish, for all working expenses, interest on and reduction of loan capital, depreciation of property, the creation of an adequate reserve fund and other charges incidental to the business of the society. In case of failure duly to accept fish the society must pay one pound by way of damages to the injured member; and a member who without the committee's written consent disposes of his fish except to the society must similarly pay one pound to the society, unless the latter prefer to penalize him by excluding him from the right to deliver fish for a certain time. The society and its members are respectively absolved from obligation to obey the Binding Rule if the work of the society cease owing to accident, labour or trade disputes, or another cause over which they have no control.

D. *The First Two Years of Business.* — The society began to trade at Kilmurvey in September 1915 when it comprised one hundred members, owning fifteen curraghs.

The crew of a curragh consists of a skipper and three men. Each carries nets to a length of about 400 yards, made up of six joined pieces, 35 fathoms long. The curraghs can easily undertake the autumn mackerel fishing which lasts from September to January and is inshore fishing. They set their nets about three miles from the shore. In the morning, if the catch is heavy, they may have to make more than one journey, bringing in two or three pieces of their nets at a time. From September 1915 to January 1916 the society sent to the outside market only cured mackerel; for the steamer which connects Inishmore with the mainland calls at Kilronan, which is five miles from Kilmurvey, and calls there only twice a week.

The spring mackerel fishing takes place in April, May and June, and it is deep sea fishing. It is undertaken by boats larger than the curraghs, locally called "nobbies". They go out some miles from the shore at night and return in the morning with their catch. In 1916 the society was able to take part in the spring mackerel fishing because it was joined by five nobbies from Kilronan. Its headquarters were moved to the pier at Kilronan, Kilmurvey becoming a mere branch. Throughout this season and the following spring and autumn seasons its activity developed.

The *system of payment for fish* has been adapted to the fact that whereas the organization is based on the principle of one man one share, the society actually trades not with individual men but with crews. Each nobbie has a crew of seven men, including the skipper who borrows from the Congested Districts Board money to buy his boat and gear. When the boat arrives in the morning with its catch the fish are counted in long hundreds (one long hundred = 126) and the manager of the society gives the skipper a docket to show how many have been received. The fish are then either cured or shipped in boxes containing one long hundred each. Payments are made about once a fortnight or at such other convenient intervals as the committee from time to time appoints. The skipper presents his docket and is paid the full current price of the fish, calculated by long hundreds. He keeps one half of the sum in order to pay back to the

Congested Districts Board its loan for the purchase of his boat and gear; from the other half he deducts a small sum to cover the provisioning of the boat at sea and other expenses; and the remainder is then divided among the crew in equal shares, from which, as already explained, they pay a shilling in the pound towards the accumulation of share capital. In the case of motor-boats the running expenses of the engine are deducted in equal halves from the share which goes to pay for the boat and the share which goes to the crew. In the case of a curragh, where the initial expenditure on buying the boat is small, the money received for the fish is paid in equal halves, the one to the skipper and the other to the rest of the crew.

The society has brought about a very important *rise in the price of fish*. Before it was formed the fishermen received from 4s. to 6s. for a long hundred of mackerel. Since its formation the corresponding average prices have been as follows: autumn 1915, 12s.; spring 1916, 8s.; autumn 1916, 17s. to 22s.; spring 1917, 18s.; early part of autumn 1917, 17s. Thus prices have been doubled and in some cases trebled.

An amazing increase of *turnover* has been secured. During the first eight months the turnover was £760; and the expenses amounted to £380, including £224 for barrels and salt, £110 for wages and £27 for freight. In the last eight months the turnover has been £14,000; and the expenses have amounted to £4,700, made up of £2,800 for freight and commission, £450 for wages, £1,100 for packing and £350 for ice.

It is seen that the ration of *expenses* to turnover has throughout been very high, a circumstance almost unavoidable in the fish trade owing to the high prices which have to be paid for requisites. Thus boxes, which are returnable but are seldom returned, cost 2s. each two years ago but now 5s.; barrels, which are not returnable, 4s. 2d. each two years ago but now 9s. 6d.; salt 32 s. a ton two years ago, now 10s. a ton. The Congested Districts Board used to sell a basket of crushed ice, weighing 6 stone, for about 2s. During the war they raised this price to 3s. 6d., and recently they have ceased to supply ice to the West of Ireland, so that the society will have to buy ice from a Dublin firm at 30s. a ton on the pier at Aran. In order to avoid this large expense, which is likely to increase, the society contemplates buying an ice-making machine, which it could use profitably owing to the excellent water supply provided by the Congested Districts Boards. As prices are daily rising the expenses of the society will probably grow, but the increase of trade will lessen the ratio of expenses to turnover, a fact illustrated in the last two years which have been years of rising prices.

The *share capital* of the society amounted at the time of foundation to £5, at the end of the first year it was £27, and at the end of August 1917 it was £143. A very satisfactory reserve fund has moreover been accumulated.

The *membership* has risen from 100 to 184. In September 1915 the members used only fifteen curraghs but now they use nearly forty curraghs, and eleven nobbies of which four are motor-boats. Of all the boats of Inishmore only five curraghs and a couple of nobbies, one of them belonging to a London firm, are outside the society.

The society has gradually enlarged its *premises*. It now rents from the Congested Districts Board two or three large stores in addition to some smaller stores on the pier ; and it has recently bought from the board for £50 the fee simple of a large and commodious store, which will be repaired and fitted up as a curing station and used as such in bad weather. At present fish are cured in an open yard by the shore and after a heavy catch the curers may have to work all night.

The society's " shamrock " brand is already becoming known on the fish market and will soon be famous. The fishing seasons have been prolonged by a month or six weeks. On Inishmore that work of development which the Congested Districts Board has attempted ever since it entered into possession in these islands has been much accelerated. The fishing industry has been established on a sound and lasting basis. Twenty years ago the whole wealth of the Aran Islands was represented by the potato patches, the pigs which were fed for a small return, the few cattle, the kelp and the carrigeen moss, and the fish which were sold precariously at low prices. The Congested Districts Board subsidized the steamer which regularly connects the islands with the mainland and the greater markets, advanced money for the purchase of boats and fishing gear, and brought over Scots to teach better methods of fishing. But until the society was founded the progress made was comparatively slight. Now the fishermen of Inishmore find themselves able to earn what is to them wealth ; and the whole population of the islands have had a lesson in the value and practice of co-operation.

E. Prospects of Further Development. — Hitherto membership of the society has been confined to Inishmore but last year the men from the south and middle islands — Inisheer and Inishman — brought their fish to Kiltonan and sold it to the society. They now wish to enjoy the advantages of co-operation. That they should form their own separate societies is highly inadvisable : the steamer does not always call at their islands which have no piers ; it would be very difficult to collect among them the necessary amount of capital, and equally difficult to find among them an efficient manager who would be their true leader. The obstacle to admitting them to membership of the existing society is that its considerable reserve fund is the exclusive property of the present members, and that these were solely charged with the heavy initial expenses. It would however be possible to extend the membership to the southern islanders if a large amount of the reserve fund were allocated as share capital in proportion to trade done with the society. Branches like that at Kilmurvey could be established on Inisheer and Inishman, on each of which a headman would be employed to issue the dockets and superintend the curing. The chief remaining difficulty would be the representation of the southern islands on the committee. If the scheme for extension of membership materializes the society will probably buy a motor-boat which will collect the fish from Inisheer and Inishman and bring it to headquarters for shipment, and which might also carry fresh fish to Galway on days when the steamer does not run.

So far the society has not supplied oil, nets or other requisites to its members, and has left the function of making loans for the purchase of boats and gear to the Congested Districts Board. But in time it may take over these enterprises. When the principles of co-operation are better understood by the fishermen it may come about that they provide themselves with all the necessities of life by means of the society's organization.

The fame of this society has spread among the fishermen of the Galway coast, and in one or two districts the leading men are now discussing whether they cannot co-operate like their fellows in Aran.

ITALY.

1. FACILITIES FOR THE LEASING OF DOMANIAL LANDS BY CO-OPERATIVE SOCIETIES. — *Gazzetta Ufficiale del Regno d'Italia*, Rome, No 253, 26 October 1917.

The decree-law No. 1676, dated 20 September 1917, satisfies an old desire of agricultural co-operative societies in that it fitly provides, for co-operative labour societies, facilities for leasing domanial lands and the State's fishing rights in public waters. It allows properties which may be let privately to be let, on far more liberal terms than is usual, to legally constituted agricultural, producers' and labourers' co-operative societies. Every limitation regarding these leases is removed; and their term is extended to nine years with an option to the government to extend it further if obligations on the lessees to make improvements or carry out particular works are imposed.

The same decree grants special facilities to co-operative societies in the matter of giving securities and guarantees for the obligations they assume, securities being limited to a certain fit quota payable together with an extra annual due. The intention is to guard the societies against usurers and against an anticipation of large capital which would damage the economy of their farms.

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2. THE INTERNAL REORGANIZATION OF THE ITALIAN CO-OPERATIVE MOVEMENT. — *La Cooperazione Italiana*, Milan, No. 1260, 7 September 1917.

Recently there was a meeting at Milan of the managing council of the *Lega Nazionale delle Cooperative* and the three central commissions of co-operation (1), in order to consider the reorganization of the co-operative movement. After ample discussion those present agreed to devote their activity to realizing the following programme: 1) the reorganization of the *Cattedre della cooperazione e della previdenza* (Chairs of Co-operation and Thrift), with a central office at Milan and branches in all the more important centres in Italy, for the popularization of the principles of co-operation and thrift and for giving help in administration and book-keeping to

(1) See our issue for September, 1917, page 15.

all co-operative and mutual societies in Italy indiscriminately; 2) the co-ordination of co-operative production and labour under the guidance and direction of the Co-operative National Committee of Labour (1); 3) the consolidation of co-operative consumption around its federal organization, the Italian Consortium of Co-operative Consumers' Societies, which has for years existed at Milan and which ought to modify its by-laws in order to be able to admit to its membership the associated consumers and the victualling institutions which, owing to the necessities of the time, have arisen for the defence of consumers; 4) the constitution of federations of co-operative agricultural societies, having both united and individual government, for acquiring, exchanging and selling the material necessary to agriculture and agricultural produce.

The directing council of the league and the three commissions mentioned also decided to present to the President of the Council of Ministers, and the Ministers of Agriculture, Industry, Commerce and Labour, Public Works, the Treasury and Finance a complete memorial as to the desires of co-operative organizations. This will support the urgency of *a*) a revision of all legislation on co-operative societies which, it is recognized, no longer responds to the development of the co-operation of the Central Commission of Co-operative Associations at the Ministry of Industry, Commerce and Labour; *b*) the establishment of forms of land settlement by means of collective leases of lands to be improved, large estates and the domanial lands of communes, religious bodies, etc.; *c*) the grant to co-operative societies of production and labour of means of carrying out public works which will better respond to national interests; *d*) the adoption by the State of a wide policy of helping and supporting co-operative organization, and an adequate provision in budgets for the training of the technical, administrative and book-keeping staffs of co-operative societies and for the Chairs of Co-operation and Thrift.

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3. COLLECTIVE FARMS IN THE PROVINCE OF PARMA. — *Federazione delle cooperative di Parma e provincia, Movimento cooperativo* (Federation of the Cooperative Societies of Parma and the Province. Co-operative Movement), No. 4, 1 November 1917.

Of recent years there have been in the province of Parma a marked diminution of public works and consequently unemployment among the workpeople. To remedy this state of affairs the provincial co-operative societies of consumption and labour have initiated a movement towards agricultural co-operation, creating new organizations which aim at leasing lands and cultivating them on their own account. The agricultural co-operative societies— collective farms — now active are not numerous,

(1) See our issue for November 1915, page 34.

but it should be remembered that this form of co-operation (1) will spread rapidly—because the first experiments have yielded good results, as appears from the following figures which refer to 1916:

	Year of formation	Members	Capital — liras	Hectares (2)	Rent — liras	Revenue — liras
Borgo San Donnino	1906	950	46,373	33.0000	5,000	17,070
Colorno	1912	463	27,854	104.9941	16,756	54,533
Fontanelle	1914	345	15,966	95.5000	14,100	55,543
Ravadese	1913	28	3,432	89.0000	16,177	57,631
Sissa	1913	131	23,981	106.2824	23,373	94,344
Total	1917		117,606	428.7765	75,406	281,721

On the 11th of last November two other agricultural co-operative societies became active, that of Soragna which was constituted last February and that of Busseto which was constituted last September. The former has leased three properties, having an aggregate area of 148 hectares, for 23,500 liras a year. The other has leased 62 hectares for an annual rent of 15,000 liras.

Further, the co-operative society of Borgo San Donnino has recently enlarged its leasehold by a holding of 33 hectares rented at 4750 liras; and in November 1918 the co-operative society of Fontanella will undertake a new important leasehold of 94 hectares, rented at 21,000 liras. Altogether additions of 337 hectares, rented at 64,250 liras, will bring the total area up to 765.7765 hectares and the total rent to 139,653 liras.

The first experiment in agricultural co-operation is due to the *Casa del Popolo di Borgo San Donnino* (People's House of Borgo San Donnino) which designed to distribute its gains among its members. It is worthy

(1) Besides collective farms, which are one of the most characteristic forms of agricultural co-operation, there also exist and prosper in Italy collective *métayages*. This is to say that vast extents of land, including not only arable and grassland but also woods and vineyards, are cultivated by associations or co-operative societies of labourers who are compensated for their work by receiving half the produce. In the Mantuan province properties have been thus cultivated for some decades; in the province of Modena there are several flourishing examples of them (Carpi, Bomporto, San Prospero, etc.); in the province of Ravenna there is one collective *métayage*, managed by a co-operative labourers' (casual journeymen's) society, which is a model of its kind—that of Massalombardo. Here the gross revenue per hectare is between 5,000 and 7,000 liras. The produce consists of fruit—peaches, pears, apples, green vegetables, grapes, wheat, tobacco, forage and live stock. Two facts suffice to show the social and economic importance acquired by collective *métayages*. The small labourers' co-operative *métayage* of Cibeno di Carpi easily provides a sufficient livelihood for the seven families of its members although previously the land supported only the family of one farmer. The society of San Lorenzo della Poppa farms on this system 40 hectares on which work the able-bodied members of quite 32 families. See in this connection *La Cooperazione Agricola*, Bologna, No. 2, 25 September 1917.

(2) 1 hectare = 2.47 hectares.

of note that the yield of the small farm leased was almost tripled in ten years, and that while the previous single lessee had barely supported a single peasant's family the co-operative society maintains on the farm in better conditions three families. It should also be noticed that when the lease fell in the rent was doubled, and that the value of the farm has much increased by the co-operative society's enlightened cultivation, the philanthropic body which let it thus deriving much benefit. In confirmation of this there is an interesting passage in the report of the deliberations of the civil hospitals of Borgo San Donnino as to the concession of a second farm: "Seeing that the intervention of the co-operative society has already markedly raised the rent, that as lessee of other farms the co-operative society has proved itself to be a stranger to speculative aims, and to care for the improvement of such farms and of the condition of labourers, and that therefore the lower price which the administration will receive will be amply compensated for by the improved state of the farm when the lease falls in... the administration resolves by an unanimous vote to grant the lease to the co-operative society rather than to any individual".

Another flourishing collective farm is that of Ravadese which obtained in 1913 the lease of two holdings and "healed the wound of unemployment" in that it ensured continuous and remunerative work to some thirty families (1). After the sacrifices of the first two years, and the expensive works and organization which were absolutely necessary to these two farms, the society "is now in such an excellent position that it is sure of a prosperous and fruitful life".

The facts that have been given are enough to show all the importance which the movement represented by the collective farms is destined to acquire in the province of Parma.

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4. AN IMPORTANT MEETING OF AGRICULTURAL CO-OPERATIVE SOCIETIES.

— *La Cooperazione Italiana*, Milan, No. 1269, 9 November 1917.

On the 28th of last October there was held at Milan an important meeting of representatives of all the agricultural co-operative societies and of many co-operative societies of labour and consumption in the province (2),

(1) See the interesting pamphlet of ANTONIO BIZZAZERO, *Le affittanze collettive per assicurare il pane e il lavoro agli umili* (Collective Farms for Ensuring Bread and Labour to the Poor). Unione delle Cattedre Ambulanti di Agricoltura Italiana. Opuscoli di propaganda. No. 1, Tip. Pelati, 1917.

(2) Shortly before, on 9 September, another meeting was held of co-operative consumers' and agricultural societies of the provinces of Bari, Foggia, Lecce and Potenza, at the *Istituto Nazionale di Credito per la Cooperazione*. It was resolved, among other things, legally to constitute a federation of co-operative consumers' societies which should have its seat at Bari and should aim at acquiring the goods needed by the federated societies and giving them necessary help. Where agricultural co-operative societies were concerned, the meeting dealt with the relations to be established with sister societies in the north of Italy for the exchange of agricultural produce. See in this connection *La Cooperazione Agricola*, Bologna, No. 2, 25 September 1917.

to consider some questions specially interesting to co-operative societies. The position of the co-operative movement in this province was shown by a detailed report, from which the following figures, having reference to 31 December 1916, emerge: 33 co-operative consumers' societies had 4628 members, and a paid-up capital of 245,000 liras, and had made sales for 1,632,854 liras, a sum estimated to have risen to 3,000,000 liras in 1917; 27 co-operative societies of production and labour had 2675 members, and a capital of 318,280 liras, and had done work worth 1,177,174 liras; five agricultural co-operative societies had 1917 members who farmed 428,7765 hectares, rented in the aggregate at 75,406 liras, and the harvests brought in to them 281,723.15 liras.

There was discussion as to action to be taken in connection with religious and public bodies to obtain leases of their lands for the co-operative societies. The matter was dealt with by Signor G. Faraboli who by means of facts — in particular a comparison between the production of two farms, in the same district and of almost equal extent, of which one was let to a co-operative society and the other to an individual — brought into relief the desirability of choosing co-operative societies as tenants of public bodies. A resolution embodying this conclusion was adopted.

The matter of "legislation in favour of agricultural co-operation" was dealt with by the Hon. M. Samoggia, who justified a resolution which claimed for associated labourers, a preference, analogous to that already given in the case of public contracts, when leases of the lands of public bodies were granted. He asked that the laws governing contracts of leases and agricultural contracts in general should be equal. Finally a vote was passed in favour of the wished-for constitution of a provincial federation of Parmesan co-operative agricultural societies, and of the complete solution of the problem of society insurance.

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5. A CO-OPERATIVE ASSOCIATION AMONG OWNERS AND USUFRUCTORIES OF WOODS. — By-laws of the "Società toscana per l'industria dei boschi" (*Tuscan Society for the Forest Industry*), Florence, 1917.

This society was constituted at Florence on 20 July 117. It aims at selling woodland products in common, opening magazines for selling them, making advances on them to members or obtaining such for members, planting nurseries for reafforestation, and constituting an office for technical advice on forestry and the valuation of products, and an office for legal consultations on the application of forest laws and rules. It further proposes to work up and convert forest products. It is the business of the council of administration to establish the criteria for and the limits of such aims of the society. The following classes of persons may be members: a) owners, occupiers and administrators of woodlands; b) all persons in a position usefully to forward the society's aims, including corporations and societies having analogous aims. The society's capital is formed of: 1) shares subscribed by the members, each of the nominal value of 100 liras,

to be paid-up entirely in one instalment on a simple application from the administrative council and on terms established by the latter; 2) the admission fee of 10 liras; c) the ordinary and extraordinary reserve; d) the income derived from the members' shares.

Rules for the sale in common of members' woodland products are appropriately established. The technical management of the society is entrusted to a director. The society will not begin to be active until its capital in shares has reached the sum of 10,000 liras.

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6. THE "FEDERAZIONE APISTICA SUBALPINA" (*Sub-Alpine Bee-Keeping Federation*)
— *Credito e Cooperazione*, Rome, No. 18, 15 September 1917.

This federation, which has had a *de facto* existence since 25 November 1914, recently acquired legal form at Turin, becoming a limited liability co-operative society. It aims principally at the progress and popularization of scientific agriculture, the improvement of its members as bee-keepers, the collective acquisition and use of the requisites of this industry, and the sale of produce. The charter indicates the various modes of pursuing these ends, and facilitates such pursuit by instituting regional delegations and amply providing in every way for the better and more profitable management of apiaries.

SWITZERLAND.

THE SWISS UNION OF RAIFFEISEN FUNDS (*Union Suisse des caisses Raiffeisen*) in
1916. — *Journal d'agriculture suisse*, 39th year, No. 45, 6 November 1917

The number of funds belonging to this union had risen at the end of December 1916 to 199. In the figures on the report it is given as 195, and the number of members as 13,867. The progress made is remarkable for in 1903, that is fourteen years ago, the number of affiliated societies was only 25 and they comprised 1,740 members. In 1910 there were 139 funds having 9,402 members. German Switzerland contributed to the union 12 new funds in 1916 and Romanic Switzerland 4.

In German Switzerland the canton of Friburg is represented in the union by 28 new funds, Vaud by 19 and Valais by 17. The cantons of Neuchâtel and Geneva do not participate in it. The union's report gives the number of the Federated funds which are really Romanic as 50. The others belong to German Switzerland.

The total turnover which was 20,000,000 francs in 1915 reached 37,000,000 francs in 1916. The available resources of the affiliated funds were increased by about a million francs, and term deposits repayable after notice given were increased by about 1,100,000 francs. Current debit accounts diminished by 25,000 francs and amounted to 1,240,000 francs.

The profit and loss account showed, in spite of the importance of bu-

business, a profit of only 19,366 francs. The union's true aim was however fully reached. The society does not aim at making profits for itself, but provides the federated funds with a possibility of mutual compensation, supervises their management by means of regular revisions, and offers them an opportunity for a safe investment of their available capital.

The modest balance was employed as follows :

4 per cent. to the quota of affairs	13,680 francs
To the reserve fund	5,500 "
Carried over to next year	186 "
	<hr/>
	19,366 "

During 1916 the union did not have to modify its previous dispositions as to rate of interest. It was $4\frac{1}{2}$ per cent. for current credit accounts, $4\frac{1}{2}$ per cent. for deposits bound for three months, and $4\frac{3}{4}$ per cent. for deposits bound for one year. Current debit accounts will pay interest at the rate of 5 per cent.

UNITED STATES

1. THE FEDERAL LAND BANK OF BERKELEY, CALIFORNIA, AND LOANS ON ORCHARDS. — *California Fruit News*, Vol. 56, No. 1529, San Francisco, 27 October 1917.

We have already explained that the activity of the Federal Land Banks, constituted in accordance with the law of 17 July 1917, while it follows uniform principles yet adapts itself to special conditions in the several groups of States. The greater or less success of the Act depends on the degree of perfection with which this adaptation is made. The Federal Land Bank of Berkeley, California, has issued the following statement of the principles on which it will make loans on orchards :

" 1. Class A Orchard Definition. Proven adaptable land with valid and sufficient water supply which could be profitably used for crops other than orchards. Trees not exceeding twenty years of age and to be in full bearing, free from disease, and which have a record of better than average crops over a period of not less than five years.

" 2. Where a loan is desired on a parcel of land less than five acres in area, it must be demonstrated to the satisfaction of the bank that such land constitutes an actual farm and that its products provide the applicant's principal source of income. Otherwise no loan can be made.

" 3. Upon lands which have no substantial agricultural value except for orchards no loans will be made.

" 4. Upon young groves not yet in full bearing loans will be based on the land as to its adaptability for other agricultural crops, plus a reasonable consideration on the cost of the planting and the age of the trees.

" 5. On other than young orchards trees will not be regarded as a basis for enhancing the basic agricultural value of the land, unless satisfactory

profits, evidenced preferably by packing-house returns for a series of years, can be shown.

" 6 Where loans are based on high value — such as a class A orchard land — the term of the loan will be related to the age of the orchard and its proven productivity. Where high productivity is shown it must be assumed that borrowers will be willing and able to meet the increased payments of shorter termed loans. On such land the term of the loan will be limited to fifteen years.

" 7. Upon orchards while not considered as class A but which show average profit returns, reasonable consideration will be given as to the enhancement of the general value of the land, provided such land meets the proper requirements as to its adaptability for other agricultural crops.

" 8. No loans exceeding \$400 an acre will be made. This is subject to the approval of the full board of directors of the Federal Land Bank of Berkeley".

* * *

2. A CO-OPERATIVE CHEESE MANUFACTURING AND MARKETING ASSOCIATION IN TILLAMOOK COUNTY IN OREGON. — MACPHERSON (Hector) and KERR (W. H.) in *Yearbook of the United States Department of Agriculture* 1916, Washington, 1917.

A survey of the cheese industry in Tillamook County, Oregon, shows the importance of proper methods of marketing for the stimulation of production, and the benefits of concentrated effort. Among the achievements of the Tillamook County Creamery Association are the standardization of the products of its member factories and the elimination of unequal competition where production and prices are concerned. A study of the methods it has employed is valuable.

Agricultural Conditions. — Tillamook County lies near the north-west corner of the State of Oregon between the Coast Range and the Pacific Ocean. The climate is mild; and the abundant winter rains and cool, clear summer weather produce rich green pasturage almost all the year round. Such conditions make it possible for farmers to obtain large yields of milk without spending much on labour or fodder.

A small dairy farm in the county, typical of the best of its kind, has been surveyed. Its 53 acres of cleared river-bottom land were valued at \$400 an acre in 1914, when \$7,000 had been invested in improvements, including the dwelling-house, barn and all outhouses. The total investment in the farm was \$32,729, and included \$2,390 spent on live stock, \$1,700 as the value of a motor-car and \$500 as the value of machinery. In 1914 the farm supported 35 dairy cows valued at \$60 each, 6 yearling heifers valued at \$25 each and a Jersey bull valued at \$75. One horse was kept and used to draw the milk to the factory. The fifty chickens were kept almost solely for the needs of home consumption. In 1914 the milk sold produced 9,411.36 pounds of fat and gave a gross income of \$3,576.32. The expenses for the year were \$923.90, which, when subtracted from the gross income, left \$2,676.10 as interest on the investment and return for

the owner's labour. If interest on the investment be calculated at the rate of 7 per cent. the return for the owner's labour was \$380.80.

Development of the Industry. — The first white settler reached Tillamook County on the first day of April 1851. The rich prairie and bottom lands soon attracted the stockman, whose herds usurped the dominion of the deer, the bear and the mountain lion. As the settlement grew the fertile soil and rich pastures bade for more complete utilization. The first serious attempt at scientific dairy-farming in the district was not however made until 1890. Three years later the first farmers' creamery in the county, the Tillamook Dairy Association, was established. The factory was completed in the spring of 1893 and worked as a butter factory in its first season. Earlier in the same year a privately owned creamery was established in the county, and this in the following spring became the first cheese factory of Tillamook County. In 1899 there were in the county eight privately owned cheese factories, producing altogether about a million pounds of cheese a year, and four large creameries having an annual output of about 350,000 pounds of butter. Cheese proved to be better adapted than butter to the prevalent uncertain means of transport, and therefore the cheese factories increased rapidly until in 1902 about forty of them were active in the county, half of them being very small and handling only the milk of from one to three farms.

In 1899 the Tillamook Dairy Association, a co-operative society, was formed at Fairview. By the end of its second year of existence it had begun to succeed, and its success led to the establishment of other local farmers' creameries. The co-operative movement has since made such progress that out of 23 cheese factories now in the county only two are owned privately. A few farmers still make their own cheese, but most of the small factories have ceased to exist, and their place has been taken by others which are larger and more economically managed and are owned and controlled by co-operative farmers.

Organization of Co-operative Cheese Factories. — Although most of the factories are co-operative all of them are organized under the Oregon corporation law. The plan of organization is simple. A few of the farmers most interested make an inventory of the dairy-farming assets in the neighbourhood, taking into account the number of cows, pasturage and conditions as to crops, and thereafter they decide whether or not the district can support a cheese factory. If their decision be affirmative a company is incorporated with sufficient capital to provide a factory adequate to the supply of milk. Co-operation between banks and farmers' companies in Tillamook County has been in a great measure responsible for the success of many of these companies in the early stages of their existence, for funds have thus been provided at low rates of interest and for long periods. In most cases the security has been in the form of a joint note of the members, but sometimes the note of the association, signed by the board of directors, has been sufficient.

The management of these factories is vested in boards of from three to five directors. The board elects from its number a president, who is

the association's legal head, and also appoints a secretary and a treasurer. In most Tillamook creameries the two latter important officers are not members of the boards. To cover working expenses a flat rate per pound is charged for manufacturing cheese, normally $1\frac{3}{4}$ cents. In large factories this price is enough to meet all charges, including the making, hauling and inspection of the cheeses, entrance charges, insurance, the cost of marketing and the annual addition to the sinking fund, and further provides for the accumulation of a considerable surplus. Since in most cases these factories are not true co-operative associations but rather farmers' stock corporations, this surplus is sometimes distributed only to the small number of suppliers of milk who are also stockholders. Associations managed on such lines have been known to pay dividends of as much as 100 per cent. on their capital stock. Such a proceeding sometimes leads to discontent among suppliers of milk who have not benefited by the distribution of surplus. Where factories are conducted on a strictly co-operative basis the plan is to pay a liberal rate of interest on the capital invested, the remaining surplus being distributed among suppliers in proportion to the amount of milk they have contributed during the year. One factory thus distributed a surplus by paying 10 per cent. on capital stock and 2 cents for every hundred pounds of milk delivered at the factory.

Central Marketing. — Before 1904 the factories, owing to their lack of facilities for storage, were obliged to send their cheese to commission houses in the large towns on the Pacific coast. The depression in price which followed was maintained until the season of low production came in the autumn, when the dealers who had stored the cheese during the summer made great profits. The producers however received in such conditions unsatisfactory prices; and consequently the various factories in the county united in order to attempt to market their cheese in common, and to provide in common the storage capacity which would enable the excess product of the summer to be kept until the better selling season. The efficiency of the co-operative plan of consolidated buying and marketing at once began to have its effect on privately owned factories, several of which went into bankruptcy or sold out between 1904 and 1906. The new plan secured better prices, brought greater returns to the farmers, and stimulated milk production on all the farms which had previously supplied these factories. This gave a great impetus to the co-operative movement: in the spring of 1909 the co-operative selling agency was handling the output of sixteen large factories and three private farm factories. The co-operative plan of selling brought about the establishment of a central office supervised by a secretary-salesman who kept in touch with all the markets and arranged the sale of the entire output of the member factories. The increase in this office's business caused the adoption of excellent accounting methods, which not only facilitated sales but also improved the quality of output. By having only one salesman to handle 90 per cent. of the county's output the Tillamook factories have been able to get for their cheeses better prices, determined by the prices on Eastern markets. Bad debts have been reduced to the minimum, the entire loss from them in the last ten years amounting to

less than \$ 500, or only $\frac{1}{60}$ per cent. of the value of sales in the same period — \$ 3,000,000. The terms of sales stipulate for payments in cash within thirty days. The regularity of such payments for cheese allows the suppliers of milk to be paid regularly. Punctual payment is no small factor in the success of any farmers' marketing association.

The Tillamook County Creamery Association. — The gravest problem was that of securing the uniform quality of the cheese produced by the several factories. At first the cheese was consigned for sale as it came from the factories, and the makers mixed good with bad and brought the whole output into disrepute. A meeting of the factories selling through one salesman was called, and resulted in the organization of the Tillamook County Creamery Association, which became active in 1909 when its membership included nine of the largest factories. According to its by-laws its objects were in part : " To bring the producers of the different creameries in Tillamook County together and maintain just and cordial relations among them, and by co-operation to advance their common interests ; to foster and encourage domestic and foreign trade pertaining to the farming interests of Tillamook County and to acquire and disseminate valuable business information ; and to adjust controversies between its members and generally to secure to its members the benefits of co-operation in the furtherance of their legitimate pursuits ".

The association has instituted an inspector who visits each of its factories regularly and has improved the quality of the milk of the associated factories and increased the quantity of cheese obtained therefrom. Under his direction inefficient workmen have been removed and cheesemaking methods have been improved in all the factories. The average yield of cheese per hundred pounds of milk increased from 10.7 pounds in 1909 to 11.12 pounds in 1914. The association now includes eighteen factories each of which the inspector visits once a week. He tests one cheese out of each vat produced : if it conform to the standard set by the association, and not otherwise, the boxes containing the cheese are stamped with the words, " Inspected by Tillamook County Creamery Association ".

The association concentrates the control of its business and marketing in the hands of a secretary-salesman. The books of record necessary to tabulating and accounting for the business of the several factories are kept under his direction in the central office. As the milk is received at the factories each morning the cheesemakers enter receipts for it on tally sheets, there being one sheet for each supplier. At the beginning and middle of the month composite tests are made of each supplier's milk. At the end of the month the tally sheets are summarized in a monthly report showing for each supplier the total amount of his milk and the results of the tests thereof. This monthly report is sent to the secretary-salesman's office, where it is used as a basis for the suppliers' monthly statements. Each cheesemaker is further required to show in a weekly report to the secretary-salesman the total amount of milk he receives and the number of cheeses he makes on each day of the week. The inspector supplements these reports by daily reports of the number of cheeses of each variety inspected and the number

duly stamped in every factory. From the inspector's reports the secretary-salesman can keep an accurate account of the number of cheeses of each kind ready for the market at all times. In consequence cheeses of the various kinds can be manufactured to meet the varying demand.

The accounts kept in the central office show the value of the milk contributed by each supplier, calculated according to its weight or its content of butterfat. This value is credited to the supplier's account, and he receives at the end of the month a cheque for its amount, less any deductions. There is a simple system of keeping an accurate account of all costs.

The following table shows the importance and growth of the production of cheese in Tillamook county from 1908- to 1914 :

Year	Quantity of milk handled	Quantity of cheese made	Value of cheese made	Quantity of cheese obtained per 100 lbs. of milk
	lbs.	lbs.	\$	lbs.
1908	—	2,073,390	259,355.29	—
1909	23,416,524	2,506,612	386,135.81	10.70
1910	23,639,664	2,541,057	400,044.84	10.75
1911	24,131,802	2,619,229	358,206.29	10.85
1912	29,139,514	3,211,004	524,718.61	11.02
1913	31,566,888	3,505,516	541,748.46	11.10
1914	33,202,516	3,694,458	568,395.53	11.12
Total	—	20,151,266	3,038,604.83	—

Part II: Insurance and Thrift

SWITZERLAND.

AGRICULTURAL INSURANCE IN 1915.

OFFICIAL SOURCE:

RAPPORT DU BUREAU SUISSE DES ASSURANCES SUR LES ENTREPRISES PRIVÉES EN MATIÈRE D'ASSURANCE EN SUISSE EN 1915 (*Report of the Swiss Office of Insurance on Private Insuring Enterprises in Switzerland in 1915*). Published in accordance with the resolution of the Swiss Federal Council on 13 August 1917. 30th year. A. Francke, Berne, 1917.

The federal report on private insuring enterprises in Switzerland in 1915 is the thirtieth of its kind. It concerns life insurance and insurance against accidents, fires, etc., as well as agricultural insurance, insurance against mortality among live stock and against losses occasioned by hail. Insurance of this last kind is organized in Switzerland only by private companies, while the insurance of live stock is undertaken by private enterprises and by public cantonal institutions with which, in the case of some cantons, owners are compelled by the law to insure their live stock. Where the two latter kinds of agricultural insurance are concerned the private companies have completely the legal form of mutual societies.

As in previous years (1) we will deal with agricultural insurance in Switzerland on the basis of the data and indications supplied by this publication of the Federal Office of Insurance. We will thus obtain an idea of the position of insurance of this kind in 1915.

§ I. INSURANCE AGAINST MORTALITY AMONG LIVE STOCK.

Three mutual societies — *La mutuelle chevaline suisse* of Lausanne, the *Badische Pferde-Versicherungs-Anstalt a. G.* of Carlsruhe and the *Garantie fédérale* of Paris — and one stock company — the *Perleberger Versicherungs-*

(1) See our issue (*Monthly Bulletin of Economic and Social Intelligence*) for August 1913 and our issues for December 1914 and November 1915.

Aktien-Gesellschaft of Perleberg in Prussia — practised insurance against mortality among live stock in Switzerland in 1915. The two former insured only horses while the last named also assumed the risks of cattle.

We noticed in our October number that the war had reacted strongly on insurance against mortality among live stock. The insurance of horses has suffered especially. The importation of horses has almost ceased. The important gaps which have been produced in the available stock of horses have been impossible to fill owing to the high prices on the market. A diminution of the sums insured and the premiums received has ensued necessarily. All the companies have felt the influence of the state of affairs; one of them was affected to a degree which obliged it in 1915 to give up insuring butchers' live stock. We should add that casualties for which indemnities had to be paid diminished in 1915 but the ratio in which they stood to the premiums received increased perceptibly none the less. This is due to the fact that the quantity of the forage used to feed the live stock has been lowered since the outbreak of war. The more intensive use of the animals has certainly contributed to the same result.

The development of insurance against mortality among live stock in Switzerland from 1912 to 1915 was as follows:

Year	Sums insured — francs	Premiums — francs	Casualties	
			Amount — francs	% of premiums —
1912	16,102,975	635,972	482,214	75.8
1913	17,573,550	638,318	541,145	84.8
1914	19,540,527	608,295	486,023	79.9
1915	13,282,799	519,364	481,580	92.7

As regards financial results obtained by these societies in 1915 we will report here only the data referring to the business accomplished in Switzerland. To make these results clearer we will resume those concerning Switzerland only from 1912 to 1915.

The *Mutuelle Chevaline Suisse* has been able to pay 75 per cent. of the estimated value of their losses to those insuring with it. As is known, the insured person insures 75 per cent. of the estimated value of his insured horses — in other words one fourth of the animals' value is not insured at all. For the first time since this society was founded in 1901 it has been obliged to apply article 16 of its by-laws and exact from its members an additional premium in order to pay for the losses of the current year. This extraordinary contribution was fixed by the administrative council at 30 per cent. of the normal premium, and it sufficed to cover the excess of the expenditure of the year which reached 57,929.10 francs.

The fundamental data for the period from 1912 to 1915 are as follows :

Year —	Number of horses insured —	Sums insured — francs	Premiums received — francs	Losses indemnified — francs
1912	7277	7,138,880	226,846	201,082
1913	7644	7,505,335	241,129	225,105
1914	7215	7,075,835	240,876	230,274
1915	6853	6,791,110	221,605	238,148

Costs of administration represented the following percentages of premiums received.

1912 — Percent.	1913 — Percent.	1914 — Percent.	1915 — Percent.
20.3	20.1	19.0	18.5

The *Badische Pferdeversicherungs-Anstalt* was able to dispense in 1915, as in the seventeen previous years, with a levy from its insured of a supplementary premium. In accordance with its by-laws this society was able to pay into its reserve fund a sum of 30,413.81 francs as against 34,712.70 francs in 1914. Its accounts closed with a profit of 153,167.32 francs, which sum also was paid into the reserve fund. Such profit was largely due to a diminution of the reserve of current premiums.

As compared with the previous year the chief department — insurance of members — showed a diminution at the end of 1915 of 3,031 members, 2,601 horses and 1,147,000 francs of insured capital.

The books showed the following results :

End of year —	Members —	Insured horses —	Sums insured — francs
1912	14,885	21,481	23,584,041
1913	15,251	21,956	24,336,610
1914	14,227	13,653	15,381,183
1915	11,196	11,052	14,234,183

The costs of administration were a little higher than in previous years. They constituted the following percentages of premiums received.

1912 — Percent.	1913 — Percent.	1914 — Percent.	1915 — Percent.
19.0	19.4	21.2	23.4

Among the causes of the particularly high losses were strangles and contagious anaemia. Hoof and leg diseases, on the other hand, and cases of the condemnation of unfit animals remained below the average. The

latter circumstance may perhaps be explained by the fact that many animals which would in normal times have been condemned and for which an indemnity would have been paid are in use to-day.

The development of this society's *Swiss* business in the last four years is shown by the following figures.

	Insured sums	Premiums	Losses
	francs	francs	francs
1912	2,768,073	136,025	122,584
1913	2,605,470	137,385	127,260
1914	2,450,782	129,447	98,562
1915	2,270,044	117,603	100,870

The *Perleberger Versicherungs A. G.* began to practise the insurance of butchers' live stock in Switzerland in 1913. As a stock company it insures only for fixed premiums and excludes all supplementary contributions from the insured. This company's progress has been satisfactory. The total sum of its insurance had slightly diminished in 1914, but rose again until it surpassed its amount in 1913. The sums insured have been as follows :

in 1913	378,784,142	francs
in 1914	377,436,166	"
in 1915	379,322,664	"

The annual accounts showed a profit of 461,276.87 francs as against 256,609.03 francs in 1914, and allowed the distribution of a 10 per cent. dividend as in the previous year. Further 197,199.74 francs were paid into the reserve for eventualities arising out of the war.

The company concluded no fresh insurance in Switzerland in 1914. Its Swiss business in the two previous years is represented by the following figures :

Year	Sums insured	Premiums received	Losses indemnified
	francs	francs	francs
1913	1,659,800	4,900	5,286
1914	5,297,190	30,409	32,348

As regards the *Garantie fédérale* the tables annexed to the report of the Federal Office of Insurance contains data, having reference to Switzerland only, with regard to the sums insured which amounted to 4,221,645 francs. Its profit and loss account refers to the total business concluded by this company even outside Switzerland, and the figures on this account showing the premiums received and the losses indemnified refer to the company's general business. The net indemnities which it paid in Switzerland,

expressed in terms of percentages of the values of the animals suffering casualties, were as follows :

1914		1915		
—	—	—	—	
56 per cent		60 per cent.		in the case of horses
60 " "		80 " "		" " " " cattle.

*
* *

To give a complete picture of the present position of insurance against mortality among live stock in Switzerland we must also notice the numerous societies which practise insurance and are not subject to the Confederation's control. They exist in almost all the cantons. We should recal moreover that by the federal law of 22 December 1893, which concerns the improvement of agriculture by the Confederation, when a canton or an association of owners of live stock decides that insurance shall be compulsorily organized on a determined territory within a commune, a district or a canton, the Confederation makes, by the medium of the cantons, grants equal to those which the cantons themselves make to local funds. The grants have been somewhat limited as a result of the application of the decree of the Federal Council of 30 October 1914 on fixing federal subventions favouring the insurance of live stock. They have been reduced to 1 franc per head of cattle insured and 40 centimes per head of small live stock. Such grants have been made by seventeen cantons and half cantons. In consequence of the application of the federal decree of 30 October 1914 federal grants were diminished in 1914 by 80,000 francs as compared with 1913, and in 1915 by 292,695 francs as compared with 1914. This measure has a purely economic character and aimed at reducing the budget expenditure.

In 1915 the Confederation made on an average a grant of 0.97 franc per head of large live stock insured and 0.36 franc per head of goats or small live stock. Thus the average grant was 0.95 franc per head of live stock ; and the total expenditure was 791,347 francs as against 1,004,684 francs in 1914. The cantons paid in grants in 1915 a sum of 1,021,869 francs or 1.23 francs per head of live stock insured.

In the following table we give some representative data as to the grants made to insurance against mortality among live stock from 1913 to 1915 :

Year	Animals insured	Number of casualties	Indemnities		Grants cantonal		Grants federal credit of 1915
			total	per casualty	total	per head of live stock	
			— francs	— francs	— francs	— francs	
1913 . . .	873,033	27,875	4,311,147	151.77	1,084,042	1.24	1,084,042
1914 . . .	916,909	28,729	4,274,994	148.80	1,104,032	1.20	1,004,684
1915 . . .	834,067	26,755	3,521,621	127.89	1,021,869	1.23	791,347

§ 2. INSURANCE AGAINST HAIL.

As in preceding years insurance against hail was practised in Switzerland in 1915 only by two companies — the *Société Suisse d'assurance contre la grêle* which has its headquarters at Zurich and *Le Paragrêle* of Neuchâtel. The former company is active throughout the territory of the Confederation and insures agricultural produce of all kinds against the risk of hail; the latter is active only in Neuchâtel and assumes only the risks of vineyards.

In 1915 it was matter for regret that there were numerous and very frequent falls of hail in Switzerland. The *Annales de l'Office central suisse de météorologie pour 1915* (Zurich) record forty-five days in which heavy falls of hail affected 921 communes and 372 districts, leaving out of account the hail-storms which had local effects, affecting only one or two communes, and which were distributed over twenty-seven days and wrought damage in forty-two communes. We give the dates of the worst falls with the numbers of communes they affected.

7 June	71 communes	1 August	102 communes
8 »	54 »	17 »	78 »
13 July	54 »		

In the four years from 1912 to 1915 the *Société suisse d'assurance contre la grêle* registered as follows :

1912	1913	1914	1915
44	60	49	59 days of hail
5816	7715	5293	8816 declarations of losses.

Le Paragrêle, on the other hand, registered in 1915 only a single day of hail — 2 August — on which the fall did little damage. The two companies obtained different financial results. For *Le Paragrêle* 1915 was an excellent year but the *Société suisse* closed its balance-sheet showing a deficit.

In 1915 the latter company concluded 1980 more insurances than in 1914 when it registered 3,490 such contracts. The sums insured increased by 9,605,950 francs, having amounted to 9,692,050 francs in 1914. The sum of the premiums received, on the other hand, diminished by 5,990.90 francs, whereas in 1914 it had increased by 254,256.90 francs. The cause of the diminution of receipts under this head is largely that the rebate of premiums due from those of the insured who had suffered no loss from hail during the last three years was raised from 10 to 20 per cent.

The sum of the indemnities paid by this company in 1915 was almost three times as large as the corresponding sum in 1914. The actual amounts were 507,492 francs in 1914 and 1,392,482 francs in 1915. The latter sum has been surpassed only in 1911 which was distinguished by many storms. The amount of the premiums in 1915 was insufficient to cover that of

the indemnities, there being a deficit of 305,661.51 francs which was met by drawings on the reserve fund. Interest was however paid on the latter account, and thus the reserve fund was diminished only by 116,921.57 francs and still stood at 4,490,822.32 francs at the end of 1915. This time it was again necessary to have recourse to a supplementary premium.

To allow a better comparative examination we give in the tables on pages 32 and 33 the results obtained by the *Société suisse d'assurance contre la grêle* from its foundation in 1880 until 1915.

A comparison of the most interesting figures in these tables for the years 1914 and 1915 gives the following :

	1914	1915
Number of policies . . .	66,897	68,877
	francs	francs
Insured capital	80,865,170	90,471,120
Premiums received	1,304,086	1,298,096
Losses indemnified	507,492	1,392,482
Reserve fund	4,607,744	4,490,822

In the case of *Le Paragrêle* the figures showing the number of policies, the insured sum and the amount of premiums are much the same for 1914 and for 1915. This company had in 1915 to pay only one small indemnity of 316 francs, and therefore could pay a sum of 33,000 francs, as against one of 9,000 francs in 1914, into its reserve fund which amounted at the end of 1915 to 108,750 francs.

The following is a comparison of the most interesting figures supplied by this company for 1914 and for 1915 :

	1914	1915
Number of policies	535	528
	francs	francs
Insured capital	560,744	565,991
Premiums received	33,731	34,007
Losses indemnified	23,631	316
Reserve fund	75,750	108,750

The indemnities paid by the two companies from 1912 to 1915, expressed in terms of percentages of the sums insured, were as follows :

	1912	1913	1914	1915
<i>Société Suisse</i>	0.8 %	1.1 %	0.6 %	1.5 %
<i>Le Paragrêle</i>	0.6 %	20.1 %	4.2 %	0.1 %

Costs of administration did not exceed a normal rate. For the *Société suisse* they were a little higher than in 1914, for *Le Paragrêle* a little lower. Expressed as percentages of the premiums received they were as follows :

	1912	1913	1914	1915
<i>Société Suisse</i>	14.6	17.3	14.8	16.1
<i>Le Paragrêle</i>	12.9	11.1	13.5	11.8

Results obtained by the "Société Suisse d'assurance contre la grêle" since its foundation,
1 Profit and Loss Account from 1880 to 1915.

Year	Receipts			Expenditure		
	Premiums	Net supplementary premiums	Other receipts Interest on capital etc.	Total receipts	Indemnities	Cost of administration and taxes
	fr.	fr.	fr.	fr.	fr.	fr.
1880-1889	1,274,739.40	400,712.80	61,162.14	1,820,014.43	1,408,799.35	390,944.95
1890	255,273.40	—	3,892.50	209,165.90	129,507.30	40,676.87
1891	282,128.30	—	3,515.61	285,643.91	203,103.60	51,456.80
1892	347,322.90	—	5,193.31	352,516.21	172,704.53	56,217.72
1893	450,600.40	—	10,510.04	467,140.44	173,729.85	63,182.86
1894	567,660.65	—	14,323.51	581,893.16	510,521.90	71,178.47
1895	582,647.70	—	20,672.46	603,320.16	451,237.10	78,245.47
1896	716,068	—	24,928.61	740,996.61	628,278.00	110,237.88
1897	703,220.10	—	23,049.36	726,809.46	595,903.20	101,372.06
1898	846,057.50	—	31,944.68	877,102.18	455,892.60	114,977.05
1899	723,632	—	33,972.20	756,704.20	105,060.10	105,520.14
1900	702,760.30	—	54,314.67	817,074.97	570,293.10	113,417.18
1901	701,598.60	—	65,749.26	767,347.86	580,703.80	120,054.21
1902	675,914.90	—	64,236.25	730,231.15	649,812.20	115,462.08
1903	808,505.80	—	67,026.31	875,532.11	389,911.30	112,738.70
1904	844,544.80	—	78,803.28	923,328.08	556,248.70	129,237.08
1905	879,950.20	—	96,386.03	976,536.23	684,836.60	133,955.20
1906	930,954.10	—	104,312.19	1,034,396.59	308,363.70	125,961.02
1907	879,175.90	—	112,560.57	991,736.47	1,001,745.20	154,890.27
1908	1,036,588.10	—	115,789.04	1,152,377.14	903,925.20	179,507.67
1909	901,490.80	—	120,003.07	1,081,493.87	310,167.30	147,429.52
1910	1,000,603	—	149,114.40	1,209,717.40	1,104,378.10	193,645.31
1911	1,138,311.80	—	140,304.42	1,278,706.22	1,419,553.10	200,724.84
1912	1,353,783.60	—	133,459.19	1,486,942.79	650,840.80	197,112.94
1913	1,040,823.70	—	158,110.25	1,207,933.95	781,684.70	178,255.79
1914	1,304,086.40	—	171,841.02	1,475,927.42	507,492	193,201.11
1915	1,298,095.50	—	188,739.94	1,486,835.44	1,392,481.90	211,275.11
Total	22,380,718.24	490,712.80	2,052,643.31	24,933,074.35	16,653,242.83	3,699,000.20
	22,880,431.04				% of premiums 72.8	% of premiums 16.2
						Profit: 4,586,822.32
						886,415.69
						116,921.57
						775,234.31
						247,993.46
						638,980.05
						341,571.72
						883,306.01
						623,897.05
						68,944.27
						372,882.11
						237,842.30
						157,744.43
						600,041.87
						16,800
						20,023.13
						66,589.85
						127,332.69
						17,332.69
						546,123.96
						307,132.53
						29,533.30
						24,80.13
						64,837.50
						187.79
						230,227.73
						123,593.96
						31,083.51
						38,981.73
						175,564.39
						148,604.26

Results obtained by the "Société Suisse d'assurance contre la grêle" since its foundation.
Proportion of receipts and expenditure to sum insured.

Year	Number of policies	Sum insured	Receipts					Expenditure		
			Premiums	Supple- mentary premiums	Various	Total	Indem- nities	Cost of admini- stration and taxes	Profits	Losses
			fr.	fr.	fr.	fr.	fr.	fr.	fr.	fr.
1880-1889	68,633	81,904,741	1,56	0.60	0.07	2.23	1.72	0.48	0.21	0.18
1890	10,294	11,461,490	1.79	—	0.03	1.82	1.13	0.35	0.34	—
1891	16,985	16,857,070	1.67	—	0.02	1.69	1.20	0.31	0.18	—
1892	22,220	20,479,340	1.60	—	0.03	1.72	0.85	0.27	0.00	—
1893	26,673	23,706,350	1.92	—	0.04	1.96	0.73	0.27	0.06	—
1894	31,140	29,286,050	1.94	—	0.05	1.99	1.74	0.21	0.00	—
1895	33,681	29,231,790	1.99	—	0.07	2.06	1.54	0.30	0.22	—
1896	37,404	33,725,790	2.12	—	0.08	2.20	1.86	0.33	0.01	—
1897	38,522	33,123,910	2.12	—	0.07	2.19	1.80	0.30	0.09	—
1898	42,597	38,767,300	2.18	—	0.08	2.26	1.17	0.29	0.80	—
1899	42,578	6,452,820	1.98	—	0.09	2.07	0.29	0.29	1.49	—
1900	43,397	37,841,500	2.01	—	0.14	2.15	1.52	0.30	0.33	—
1901	43,273	37,249,900	1.88	—	0.18	2.06	1.56	0.32	0.18	—
1902	44,499	37,702,160	1.79	—	0.17	1.96	1.72	0.31	—	0.07
1903	47,810	43,295,820	1.87	—	0.15	2.02	0.90	0.26	0.86	—
1904	50,444	46,765,840	1.80	—	0.17	1.97	1.19	0.28	0.50	—
1905	52,913	49,657,870	1.77	—	0.20	1.97	1.38	0.27	0.32	—
1906	55,454	53,795,920	1.73	—	0.19	1.92	0.57	0.23	1.12	—
1907	55,500	55,264,780	1.59	—	0.20	1.79	1.81	0.28	—	0.30
1908	59,839	64,307,180	1.61	—	0.18	1.79	1.41	0.28	0.11	—
1909	58,463	62,305,650	1.54	—	0.19	1.71	0.50	0.24	1.00	—
1910	60,456	67,420,780	1.57	—	0.22	1.79	1.64	0.28	—	0.13
1911	61,931	71,322,080	1.59	—	0.20	1.79	1.90	0.28	—	0.48
1912	63,361	79,857,960	1.60	—	0.17	1.86	0.81	0.25	0.80	—
1913	63,407	71,173,120	1.48	—	0.22	1.70	1.10	0.25	0.35	—
1914	66,897	80,865,170	1.61	—	0.21	1.82	0.63	0.21	0.00	—
1915	68,877	90,471,120	1.43	—	0.21	1.64	1.54	0.23	—	0.13
Total	1,269,308	1,304,407,501	1.72	0.4	0.16	1.91	1.28	0.28	0.42	0.07

In consequence of rains and of the mobilization of the Swiss army, which absorbed a large number of experts at the very moment of the harvest — the season in which their presence is most necessary — the work involved by the valuation of losses was considerably retarded, and the amounts at which indemnities were fixed were consequently affected.

We must recall that the Confederation and the cantons can maintain insurance against hail by means of grants. These grants are paid in accordance with the provisions of cantonal laws and of the federal law of 2 December 1893 on the improvement of agriculture by the Confederation. Twenty-one cantons make grants; only those of Uri, Glaris, Tessin and the Grisons make none, and thus prevent agriculturists from profiting by the federal grants in favour of insurance against hail. The other cantons become responsible for a part of the premium and the costs of a policy which varies from 15 to 40 per cent., and formerly the Confederation repaid to them half of the sums they thus spent. But the Federal Council was obliged to have recourse to inevitable measures of economy and to modify the provisions which had hitherto obtained. On 11 December 1914 it promulgated a decree by which cantons making grants in favour of insurance against hail receive annual federal grants equal to such cantonal grants. These federal grants may not however exceed: a) 50 per cent. of the cost of the insurance policies; b) 20 per cent. of the cost of insurance premiums in the case of vines, 12.5 per cent. in that of other crops.

This decree aimed at slightly diminishing the federal budget expenditure without bearing too hardly on the insured. It allowed the Confederation to save 30,062 francs in 1915.

The following table contains data as to the amounts of the cantonal and federal grants made in favour of insurance against hail in 1915 in the twenty-one cantons which make such grants.

Grants to Insurance against Hail from 1910 to 1915.

Years	Policies	Sums insured fr.	Premiums fr.	Cantonal grants (including federal grants)			Federal grants fr.
				a) cost of policies fr.	b) premiums fr.	c) total fr.	
1910 . .	60,597	67,984,696	1,098,361	* 118,897	* 270,339	* 389,236	194,618
1911 . .	61,991	72,036,190	1,219,585	* 123,241	* 341,579	* 464,820	232,410
1912 . .	65,421	80,495,106	1,393,989	* 129,404	* 393,386	* 522,791	261,395
1913 . .	63,408	71,791,080	1,089,392	* 133,830	* 299,490	* 433,321	210,660
1914 . .	66,661	81,356,404	1,324,499	69,017	192,441	261,458	261,458
1915 . .	68,829	91,014,971	1,331,880	65,233	183,045	248,278	225,395

* Cantonal and federal grants together.

MISCELLANEOUS INFORMATION RELATING TO INSURANCE AND THRIFT IN VARIOUS COUNTRIES.

FRANCE.

INSURANCE AGAINST HAIL, IN 1916. — *The Argus*, Paris, 14 October 1917.

In its last annual notes on the working of societies insuring against hail the *Argus* has been able as yet to deal only with three societies, *L'Aisne*, *La Ruche du Pas-de-Calais* and *La Régionale du Nord*, all of them in invaded country and unable to publish exact reports.

The following is a comparison, thus limited, of the business done in 1915 and 1916 by the companies having fixed premiums and the mutual companies.

	<u>1915</u>		<u>1916</u>	
Number of the insured . .	201,859	francs	198,316	francs
Value insured	927,128,713	• "	938,510,419	"
Premiums and subscriptions	12,861,733	"	13,591,365	"
Indemnities	6,311,446	"	9,850,359	"
Reserve fund.	23,246,462	"	23,644,005	"

It is seen that insured capital, premiums and especially indemnities have increased, the latter being in 1916 in excess by 3,538,913 francs of their sum in 1915.

The following table shows the business done by each company or society.

Names of companies (In order of priority of foundation)	Number of the insured	Value insured (francs)	Premiums or subscrip- tions in 1916 (francs)	Indem- nities, costs of settlement (francs)	Commissions and general costs (francs)	Profits or excess of the Year (francs)	Reserve fund at end of 1916 (francs)
<i>Stock Companies.</i>							
L'Abeille	63,909	261,769,763	5,058,815	4,078,673	1,212,862	279,693	2,956,005
La Confiance	32,603	129,399,411	2,094,642	1,471,065	564,905	50,836	2,136,171
	96,512	391,169,174	7,153,457	5,819,738	1,777,767	228,857	5,092,176
<i>Mutual Societies.</i>							
La Cérés	8,526	45,807,600	386,803	283,234			1,999,488
Société de Toulouse . .	25,788	121,134,330	974,921	870,360	"	"	5,565,392
Seine-et-Marne	2,500	47,558,015	376,862	17,941	"	"	1,416,764
Aisne (1)	"	"	"	"	"	"	"
Etoile	8,168	77,194,800	746,147	327,620	"	"	3,540,130
Beauceronne Vexinoise .	1,500	16,808,400	155,713	47,149	"	"	834,831
Seine-et-Oise	800	34,014,312	119,050	1,582	"	"	521,782
Garantie Agricole . . .	526	16,455,900	88,679	48,012	"	"	1,035,460
Ruche (1)	"	"	"	"	"	"	"
Régionale du Nord (4) .	"	"	"	"	"	"	"
La Grêle	6,219	15,560,120	225,407	89,694	"	"	1,232
Mutuelle Générale . . .	7,507	23,681,407	312,921	213,818	"	"	"
Ferme	22,956	96,207,309	2,025,000	1,532,500	"	"	3,636,750
Rurale (2)	17,214	52,910,052	1,026,405	598,711	"	"	(2)
	101,804	547,341,245	6,437,908	4,030,621	"	"	18,551,829
<i>Summary.</i>							
Stock companies . . .	96,512	391,169,174	7,153,457	5,819,738	1,777,767	228,857	5,092,176
Mutual Societies . . .	101,804	547,341,245	6,437,908	4,030,621	"	"	18,551,829
Total	198,316	938,510,419	13,591,365	9,830,621	1,777,767	228,857	23,644,005

(1) In invaded country.

(2) The *Rurale* is guaranteed by the *Société de Garantie de la Rurale*, a limited liability society having a capital of 1,800,000 francs.

Part III: Credit

ITALY.

RECENT PROVISIONS AS TO AGRICULTURAL CREDIT.

SOURCES:

- DECRETO LUOGOTENENZIALE 10 MAGGIO 1917, N. 788, RECANTE PROVVEDIMENTI PER LA COLTIVAZIONE DEI CERALI (*Lieutenancy Decree 10 May 1917, No. 788, containing Provisions for the Cultivation of Cereals*). *Gazzetta Ufficiale del Regno d'Italia*, Rome, No. 217, 10 May 1917.
- CIRCOLARE N. 18,000 IN DATA 25 MAGGIO 1917 RELATIVA AD OPERAZIONI DI CREDITO PER LA COLTIVAZIONE DEI CEREALI ED ALTRI PRODOTTI ALIMENTARI (*Circular No. 18,000 dated 25 May 1917 as to Operations of Credit for the Cultivation of Cereals and other Foodstuff*).
- DECRETO LUOGOTENENZIALE 28 GIUGNO 1917, N. 1035, CHE STANZIA UN FONDO DI VENTI MILIONI PER ANTICIPAZIONI AGLI ISTITUTI DI CREDITO AGRARIO, PER SOMMINISTRAZIONI AGLI AGRICOLTORI a termini del precedente decreto (*Lieutenancy Decree 28 June 1917, No. 1035, advancing a Fund of 20,000,000 liras to Institutions of Agricultural Credit to be granted to Agriculturists on the terms of the preceding decree*). *Gazzetta Ufficiale del Regno d'Italia* Rome, No. 154, 30 June 1917.
- DECRETO LUOGOTENENZIALE 26 LUGLIO 1917, N. 1269, CONTENENTE DISPOSIZIONI PER AGEVOLARE ALLE ASSOCIAZIONI AGRARIE IL CREDITO PER LA COLTIVAZIONE DEI CEREALI. (*Lieutenancy Decree 26 July 1917, No. 1269, containing Provisions placing within reach of Agricultural Associations Credit for the Cultivation of Cereals*). *Gazzetta Ufficiale del Regno d'Italia*. Rome, No. 195, 18 August 1917.
- DECRETO LUOGOTENENZIALE 23 AGOSTO 1917, N. 1320, RECANTE PROVVEDIMENTI PER AGEVOLARE LA PROVVISTA DELLE SEMENTI E DEI CONCIMI CHIMICI AGLI AGRICOLTORI DELLA SARDEGNA (*Lieutenancy Decree 23 August 1917, No. 1320, containing Provisions facilitating the obtaining of Seeds and Chemical Manures by the Agriculturists of Sardinia*). *Gazzetta Ufficiale del Regno d'Italia*, Rome, No. 205, 30 August 1917.
- DECRETO-LEGGE LUOGOTENENZIALE 23 AGOSTO 1917, N. 1502, CHE MODIFICA LE DISPOSIZIONI SUL CREDITO AGRARIO IN SARDEGNA CONTENUTE NELLA LEGGE (TESTO UNICO) 10 NOVEMBRE 1907, N. 841 (*Lieutenancy Decree 23 August 1917, No. 1502, modifying the Provisions as to Agricultural Credit in the Law (Single Text) of 10 November 1907, No. 841*).
- DECRETO-LEGGE LUOGOTENENZIALE 4 OTTOBRE 1917, N. 1604, RECANTE PROVVEDIMENTI PER IL CREDITO AGLI ENTI AGRARI DEL LAZIO (*Lieutenancy Decree-Law 4 October 1917, No. 1604, containing Provisions for Credit to Agricultural Bodies in Latium*). *Gazzetta Ufficiale del Regno d'Italia*, Rome No. 242, 13 October 1917.

In recent months many measures have been passed in Italy which aim at encouraging agricultural production and largely increasing agricultural credit. We think it opportune to notice them briefly.

§ I. THE DECREES OF 10 MAY AND 20 AND 30 JUNE 1917.

The decree of 10 May 1917, No. 788, contains, as we already noticed in our issue for last July, a series of provision aimed essentially at intensifying the cultivation of cereals and other foodstuffs. In the matter of credit it authorizes the institutions of agricultural, ordinary and co-operative credit, the ordinary savings-banks, the *Monti di Pietà* and *Monti Frumentari* and the agricultural loan funds to grant loans for cultivating corn, other cereals, vegetables and edible root crops, independently of any provision of laws, rules or by-laws, and in the measure and for the terms required in individual cases, according to whether cultivation is intensive or extensive and according to the time in which crops ripen. It should be noted how opportunely the decree makes an appeal for the attainment of its goal not only to special institutions of agricultural credit but also to the other institutions of credit we have named.

The loans granted for such cultivation are, by one of the notable innovations in the sphere of agricultural credit, secured by a legal privilege which no longer bears, as in the past, on a single product, but indiscriminately on all products of a farm, including hanging fruits and provisions produced on the farm and stored in the dwelling-house and annexed buildings. This privilege need not be specially stipulated but arises from the single fact of the concession of the loan and has legal force without a particular agreement between the parties concerned.

Hitherto, on the other hand, loans for seeds, for cultivation and the harvest and for the acquisition of manures and fertilizers have enjoyed the privilege established by Clause 5 of Article 1958 of the Italian civil code, a privilege bearing on the single product for the benefit of which the sum or material lent was intended. In order to have a wider security institutions affording agricultural credit have had to make with the borrower a special agreement constituting a privilege in the terms of Clause 1 of the law of 23 January 1887, No. 4276 ; and thus it has been possible to create a privilege falling on the same objects as those on which the tenant's privilege is exercised in virtue of Clause 3 of the Article 1958 already cited. The decree with which we are now concerned provides, as has been said, that without formality or expense the privilege becomes the right of the lending institution.

The aforesaid loans are in the form of bills on which the purpose of the loans and the farm for which they are lent must be indicated.

The law of 1887 (Article 10) further provides that if a debtor alienate the property subject to the privilege without replacing it or allow it to deteriorate gravely or abandon the cultivation of his farm, or in any way, by his fraud or fault, notably diminish the security of the creditor insti-

tution, the latter may demand that the contract be determined according to the terms of Article 1165 of the civil code. This simple reference to common law is one of the causes of the meagre results produced by the statute in question. It was justly observed that in the cases contemplated by this provision the debtor in fault should at least have been denied the benefit of the delay authorized by the aforesaid Article 1165. A notable improvement on earlier conditions should therefore be considered to have been introduced by the provision of the decree we are examining, according to which a debtor who depreciates or withdraws the property subject to the privilege, or wholly or partially employs the sum lent to him for objects other than that for which it is lent, is punished by the penalty established by Article 203 of the Italian penal code, that is to say by imprisonment or a fine.

Another useful innovation concerns the simplification of the executive procedure. If the debtor does not entirely restore the amount of the loan when it falls due, the praetor may, at the instance of the lending institution and after he has obtained summary information, order the sequestration and sale of the property subject to the privilege. Such sale may take place without legal formalities.

Finally, agreements relative to the loans in question are exempt from every sort of stamp and registration duty; and legal acts and bills of exchange depending on these loans are subject to taxation in normal conditions.

Two other decrees were promulgated to extend and to apply that we have examined.

The first, dated 28 June 1917, No. 1035, was made to render the loans of which we have spoken more fitted to encourage the cultivation of corn and other cereals. It allows the concession to institutions of agricultural credit, authorized by special laws, of advances up to an amount of 20,000,000 liras at 3 per cent. interest (1). The sums thus advanced will be lent by the institutions to agriculturists by means of intermediary bodies, or directly when no recourse to intermediary bodies is possible. If the loan is required for the provision of seeds the institution of credit will give the landowner, when issuing a bill, a bond allowing him to withdraw at cost price a quantity of seeds equivalent to its amount from the provincial grain consortium. The State will provide the provincial grain consortium with seeds for distribution.

The loans which institutions of agricultural credit are authorized to make and the sums they receive as advances will bear interest at a rate not higher than 4 per cent. if the loans are made to agriculturists directly, or 5 per cent. if they are made through intermediary institutions.

The second decree in question (ministerial decree of 30 June 1917) aims at extending in the farming year 1917-1918 the cultivation of corn, other cereals and edible root crops in the southern mainland and the islands,

(1) This fund was augmented by 10,000,000 liras by the lieutenantcy decree of 11 November 1917, No. 1831. See *Gazzetta Ufficiale del Regno d'Italia* for 15 November 1917, No. 269.

and allows that, in so far as more land than in 1916-1917 is given up to these crops, the institutions of agricultural credit which are authorized by special laws may grant subsidies, up to the amount of 70 liras per hectare of the added area, for the execution of the work necessary to preparing it for sowing. Such grants may be made to landowners or lessees so long as they cultivate their lands directly, and to farmers having the usual contracts of tenancy. A subsequent ministerial decree, dated 24 August 1917, raised the maximum limit of the loans to 100 liras per hectare.

§ 2. THE DECREES OF 26 JULY AND 19 AND 28 AUGUST 1917.

Other noteworthy provisions are contained in the lieutenantancy decree of 26 July 1917, No. 1269, which aims at facilitating the cultivation of cereals by agricultural associations. By the terms of this decree agricultural loans and current accounts in favour of agricultural associations which are legally constituted, whether as moral corporations or as co-operative societies, for the conduct of the farms which they manage, will be regulated only by the rules of the lieutenantancy decree of 8 October 1916, No. 1336, which we examined in our issue for December 1916 (page 82), to which we refer the reader. When such loans and current accounts are granted for the cultivation of cereals by duly authorized institutions they will be secured by the privilege determined by Article 9 of the cited decree of 10 May 1917, No. 788, on the property specified in the first part of the same Article, and the privilege determined by the lieutenantancy decree of 8 October 1916, No. 1336, on other property. Lending contracts as to the operations we have indicated and copies of extracts therefrom will be exempt from the stamp and registration duty. Bills depending on such contracts, on which the limits of such contracts should be indicated, are exempt from the stamp duty. Finally the *Istituto Nazionale di Credito per la Cooperazione* is included among the institutions authorized to grant loans for the cultivation of cereals, and is assimilated to institutions of agricultural credit as regards the advances made by the State with which the lieutenantancy decree of 28 June 1917, No. 1035, deals.

In execution of the provisions we have examined the subsequent decrees of 19 and 28 August 1917 granted the following advances to each of the institutions of agricultural credit indicated below :

- 1) Savings-Bank of the Bank of Naples, for the provincial funds of agricultural credit which it manages in accordance with the law of 2 February 1911, No. 70, 10,000,000 liras.
- 2) Provincial fund of agricultural credit for Basilicata, 1,500,000 liras.
- 3) *Istituto di Credito Agrario Vittorio Emanuele III.* for Calabria, 1,000,000 liras.
- 4) *Cassa Ademprivile* of Sassari and Cagliari, 1,500,000 liras each.
- 5) Federation for Agricultural Credit in Marcia, for the agricultural funds of the region, 1,000,000 liras.

6) Federation for Agricultural Credit in Umbria, for the agricultural funds of the region, 500,000 liras.

7) *Istituto Nazionale di Credito per la Cooperazione*, 2,000,000 liras.

The Bank of Naples is charged to make these advances which amount altogether to quite 19 million liras. Sums eventually not required by any of the cited institutions may be assigned to others which are found to have received insufficient advances.

§ 3. SPECIAL PROVISIONS FOR SARDINIA.

The provisions we have examined are general in character. They were founded on the decree of 10 May 1917, No. 788, which established the starting-points for State action in the matter of the intensification of the cultivation of food crops. But the examination of the conditions of single Italian districts brought into notice particularities which could not be neglected, and it became necessary to make special provision for some regions, among them Sardinia. We have already seen how, for growing cereals, the agriculturists of this island can obtain loans from the local institutions of agricultural credit, in order to prepare the land for sowing, at the rate of 100 liras a hectare, and that if they extend the area cultivated in 1916-1917 they can also obtain loans of seed for the additional land to be sown.

For the purpose of such grants the *Casse Ademprivili* of Cagliari and Sassari have already obtained from the State an advance of 1,500,000 liras each.

Further a lieutenantcy decree of 23 August 1917, No. 1329, authorizes these funds to acquire seeds in order to grant them at cost price to the *Monti Frumentari*, the agricultural co-operative societies and agriculturists, either for cash or on credit.

For this purpose the State will grant these funds not more than 2 per cent. of the value of the seeds granted. Other facilities are granted by the same decree for the acquisition of chemical manures by agriculturists who cultivate directly holdings not more than ten hectares in area, the State contributing with a sum of 200,000 liras to the payment of a quota of the price not exceeding 25 per cent.

In connection with the provisions having immediate force, and in order at once to obtain conditions favourable to an extension of cultivation in the coming year, certain modifications, which have for some time been the objects of votes and proposals, have been introduced into the law which regulates agricultural credit in Sardinia (single text, 10 November 1917, No. 844).

The new provisions, contained in the lieutenantcy decree of 23 August 1917, No. 1592, enlarge the whole sphere of activity of the *Casse Ademprivili*, for they establish that the advances referred to in Clauses 3 and 4 of Article 1 of the cited law of 10 November 1907, No. 844 (advances for buildings settlers' houses and suitable stables, making farm roads, restoring vineyards, providing water-supplies, etc.) may be made indiscriminately

to leaseholders, recognized agricultural co-operative societies, landowners and farmers.

Moreover these advances may be not only for the objects stated but also, to individuals and societies, for the protection of water-supplies and for the draining and irrigation of farms, the construction of wells and drinking-places and the systematization and breaking up of lands and for making enclosing walls and hedges and otherwise enclosing farms.

Before granting such advances the mortgage securing them will be sufficiently guaranteed if the applicant shows that he is the lawful owner of the land which is to be improved.

Farmers who are not owners, whether individuals or societies, may obtain the advances on a simple personal security to be fixed by the administrative council of the *Cassa Ademprivile*.

The decree we have cited further provides for the new regulation of the *Monti Frumentari* in the island. It aims at providing that such of them as possess a capital of less than 2,000 liras, or in any way cannot fulfil their functions to advantage, shall be obliged by a decree of the Minister of Agriculture, who shall hear on the subject the provincial *Cassa Ademprivile*, to unite with *Monti Frumentari* in conterminous communes or to be concentrated in the *Cassa Ademprivile*. The latter shall, if such a concentration take place, invest the capital of the concentrated *Monti* by preference in loans to the inhabitants of the communes in which they are situated. It may, with the authorization of the Minister of Agriculture, institute branches and appoint representatives where there appears to be need for them.

The advances of the *Casse Ademprivili* to a *Monte Frumentario* may amount to 20,000 liras. The maximum limit of the loans which the *Monti Frumentari* may grant is 1000 liras, whether the loans be in kind or in cash. On their loans, whether in kind or in cash, they may receive interest up to the rate of 2 1/2 per cent. in addition to the rate they pay to the *Cassa Ademprivile*. They are administered by commissions composed of five members of whom one is nominated by the prefect of the council, two by the communal council, and by forty or twenty larger contributors to the land tax according to whether or not the commune in question have a population of more than 3,000. Finally the supervision of the *Monti Frumentari*, and also of the agricultural funds and the agricultural consortia which are not co-operative in form, is entrusted to the *Cassa Ademprivile* of each province, which is granted the staff and funds it consequently needs.

§ 4. PROVISIONS FOR AFFORDING CREDIT TO THE AGRICULTURAL BODIES IN LATIUM.

By a decree of 4 October 1917, No. 1604, the *Istituto Nazionale delle Assicurazioni* (National Institute of Insurance), the *Cassa Nazionale di Previdenza per l'Invalidità e la Vecchiaia degli Operai* (National Fund of Thrift for the Invalidity and Old Age of Workpeople), the *Istituto Na-*

zionale di Credito per la Cooperazione (National Institute of Credit for Co-operation), the savings-banks, the *Monti di pietà* and the institutions of ordinary and co-operative credit were authorized, independently of any provision of laws, regulations or by-laws, to grant loans to the agricultural bodies in Latium for the acquisition of land, the payment of capital and dues, for emancipations and, in general, for anything necessary to the improvement of land or the transformation of agriculture in properties held collectively. To secure such loans the agricultural bodies of Latium will allow the lending institutions to be regularly represented on the collectorship of the societies' revenue: and when the revenue collected in a year does not reach the whole amount of the payments due in that year to the lending institutions the State will advance the difference.

The *Istituto nazionale di credito per la cooperazione* is further authorized to give credit to the aforesaid agricultural bodies in order to provide them with necessary means for the pursuance of ordinary cultivation and the farming of their lands (acquisition of live and other stock and seeds, payment of wages and of expenses of harvest, etc.).

Loans for the acquisition of lands, emancipation from dues and, in general, the improvement of lands, can be for a maximum term of fifty years, the debtor having the option of extinguishing them earlier. The rate of interest may not exceed $5\frac{1}{2}$ per cent. and the State will contribute to its payment up to $1\frac{1}{2}$ per cent.

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To conclude: as the ex-Minister of Agriculture, Signor Raineri, remarked in a recent speech at Salerno on the government's agricultural policy, a new system of agricultural credit has gradually taken form in the recent exceptional provisions. The credit affected used to be essentially personal. The new measures have transformed it into a credit predominantly based on real estate. The decree of 10 May 1917 for the cultivation of food stuffs enlarged the basis of the privilege which the law had created, so that it now covers not only the crop which the loans contribute to produce, but also all crops of the land indiscriminately, including hanging fruit and stored provisions. Thus the rules were modified and land credit was created. The subsidizing of the institutions of agricultural credit with important resources of the Treasury was then undertaken, in order that they might grant loans as liberally as possible. All these measures were inspired by the fundamental desire to increase production and to satisfy the new needs of agriculture.

MISCELLANEOUS INFORMATION RELATING TO CREDIT IN VARIOUS COUNTRIES

CANADA.

THE SHORT TERM RURAL CREDIT ACT OF MANITOBA. — *The Grain Growers' Guide*,
Winnipeg, 17 October 1917.

Mr. George W. Prout presented to the Manitoba legislature at their session of 1917 an Act providing for rural credit which received the royal assent on 9 March. This is the Short Term Rural Credits Act which promises to have much influence in building up agriculture in Manitoba.

The Act provides for the incorporation of a rural credit society in any municipality on the application of fifteen farmers to the governor-in-council. An officer is appointed by the government to act as secretary-treasurer to the society until the organization is completed when such an appointment is made permanently. The society cannot begin business until it have secured fifty members each of whom has subscribed for one share of \$100 and paid up 10 per cent. of its amount. The provincial government subscribes for a sum equal to half that subscribed by the fifty farmers, namely \$2,500, and the local municipality for other \$2,500. The total capital stock thus reaches the sum of \$ 10,000. Two or more municipalities may co-operate to pay the municipal subscription, but the total municipal subscription must in no case exceed 50 per cent. of that of the farmers. The municipal subscription may be in municipal bonds. The capital jointly subscribed by fifty farmers, by the rural municipalities and by the province of Manitoba gives a basis for credit at the bank.

When the society is completely organized the conduct of business is vested in a board of nine directors, three elected by the members of the society, three named by the municipality and three appointed by the government of Manitoba. The directors appointed by the Government must include a graduate in agriculture who becomes the government supervisor of agriculture in the district. He may be known as district representative or county agent. One director, who acts as secretary, must be a capable accountant and is the only paid official of the society.

The Act is specifically framed to provide for loans for a definite period to enable regular farming operations. It allows of loans for the following purposes :

1. The purchase of seed, fodder or other supplies ;
2. The purchase of implements and machinery ;
3. The purchase of cows, horses, sheep, pigs and other animals ;

4. The payment of the cost of operations of farming, ranching, dairy farming or the like ;

5. The payment of the cost of preparing lands for cultivation.

All loans are guaranteed by the society. Each member is liable up to the limit of the stock he holds and for whatever he borrows. The safety of the joint security provided under the Act enables the society to borrow from the bank at 6 per cent. The money thus borrowed is lent to the farmer at 7 per cent. on his note, and the society's security consists in the animals, machinery, goods or personal property which he purchases wholly or partly with such loan, and of the offspring or products arising out of the animals or goods so purchased.

The notes covering these loans mature not later than 31 December of the year in which they are made. Thus the Rural Credits Act saves both the banker and the farmer the inconveniences incidental to frequent renewals of these notes. When however the loan is for machinery or live stock, or other object from which early returns cannot reasonably be expected, the loan may, with the approval of the directors of the society, be renewed from year to year.

Some scepticism which existed was proved unfounded, when the co-operative spirit of the farmers in the district caused the formation of the St. Andrews Rural Credit Society, having fifty-two members, in the rural municipalities of St. Andrews and St. Clements. The headquarters of this society are at Selkirk.

The first application for a loan was approved by the directors of this society on 6 June, and on 17 October about 25 loans, of the approximate value of \$550 each, had been made. The amount of loans varied from \$150 to \$2,000, and they were for practically every purpose for which money can be borrowed under the Act except for the purchase of seed. Seventeen were for breaking up land.

We reproduce a typical application for a loan :

" I, John William Brown, of the Municipality of St. Clements in the Province of Manitoba, hereby apply to the St. Andrews Rural Credit Society for a loan of Twelve Hundred Dollars (\$1200) under the terms of the Rural Credits Act, to be used for the following purposes :

For purchase of cattle	\$	300
For purchase of Machinery	"	50
For expenses of putting in and taking off Crop . .	"	350
For clearing and breaking 50 acres. This part I wish renewed	"	500
	\$	1200

and I agree to pay the said loan on or before the thirty-first day of December 1917, with interest at the rate of seven per cent. per annum from the dates the same or parts thereof are received to date of payment.

John W. Brown
(Signature)

June 8th 1917.

" APPROVAL.

" To the Dominion Bank.

" The St. Andrews Rural Credit Society hereby approves the foregoing application and guarantees the payment of the said loan

" Passed by the Directors this 15th day of June 1917.

F. W. HOOKER,

President.

CHAS. H. GIFFORD,

Secretary."

* * *

It is an interesting circumstance that a farmer whose application for a loan is granted uses the loan only as he needs it and pays interest only on the used portion.

Since the St. Andrews society was founded new societies have been organized at Langruth, Oakville, Oak Lake and Biscarth. Farmers who have experienced the advantages of the credit afforded are the best propagandists of the movement.

The Rural Credits Act also provides that the societies may act as agents for the members in buying supplies and selling products, and may promote co-operation for the improvement of the conditions of farm life, endeavouring to extend their activity to all residents in their districts.

An important work is directly encouraged by the appointment of graduates of agricultural colleges to the directorate of societies. These men will do the same work as the agricultural representative in Ontario and the county agent in the United States, but they have at their service an instrument which will much increase the rapidity and effectiveness of their action. The Rural Credit Societies will bring them into immediate touch with many of the farmers who need their help most. The following are a few of the directions in which it is suggested that they may render service: they may help the farmer to secure good seed and better stock; manage or advise in the management of co-operative buying or selling associations; give demonstrations of various farming operations, such as the elimination of gophers, weeding and the controlling of plant and animal diseases; secure plans for modern farm buildings; hold courses of lectures; and superintend the application of loans to the objects for which they are intended.

This brief analysis has shown that the Rural Credits Act of Manitoba is of the first importance to agricultural organization.

ITALY.

1. THE INSTITUTION OF A SYSTEM OF CURRENT ACCOUNTS AND POSTAL ORDERS. — *Gazzetta Ufficiale del Regno d'Italia*, Rome, No. 219, 15 September 1917.

By the lieutenantcy decree-law of 6 September 1917, No. 1451, a system of current accounts and postal orders, dependent on the Ministry of Posts and Telegraphs, has been instituted in Italy. It aims at eliminating the

risks of transporting coin, at economizing the time and money spent on such transport, at facilitating exchange, diminishing the passage of coin, etc. (1). The following are the chief rules of the new system.

Every individual and every legal person, including firms, collective bodies and offices, may benefit by the new system on making application and on fulfilling the conditions established by the rules. Married women and minors who have reached the age of eighteen are fully qualified for this purpose.

The assets of the current accounts are formed : 1) by payments of money by those in whose name they stand or by others for their benefit ; 2) by inscription in their accounts of their credit, by means of recovered orders, bills received, values bequeathed to them or other securities ; 3) by credit transferred from other accounts.

Persons having current accounts may use their credit *a)* to withdraw money or cause its withdrawal at the office where they have an account ; *b)* to cause payments to be made by means of the post-offices ; *c)* to have their credit transferred wholly or partially to another person having a current account (*bancogiro*).

The administration provides that all operations belonging to the service shall immediately be effective, and the administration is liable for the whole sum paid in, gradually freeing itself from such liability as payments are made in the manner established by the rules. All other liability is excluded.

Action for the rectification of a postal current account must be taken within a year. All other action in connection with such an account must be taken within a period of three years. If such term elapse without any operations or other action suspending the rule being undertaken by the person in whose name the account stands, the credit of the account, including deposited securities, is acquired by the administration. Disputes relative to postal current accounts belong to the commercial jurisdiction.

A current account is determined legally by the forfeiture, the deprivation or the failure of the person in whose name it stands. Until it be wound up and the balance be placed at the service of the person in whose name it has stood or his representatives, his credit cannot be sequestrated or pledged.

No person having a current account can draw orders on one day in one place for a larger sum than 10,000 liras.

Every operation of paying in money or credit, transferring it or causing payments to be made, is subjected to a fixed duty of ten *centesimi* payable by the applicant. On payments to be effected in cash there is another duty of twenty-five *centesimi* on every thousand liras paid. For every extract from an account, beyond that sent periodically to the person in whose name it stands, a due of fifty *centesimi* is payable. No other tax

(1) For the economic and legal importance of such a measure in Italy see the learned report presented to the president of the Chamber on 22 June 1917 by the parliamentary commission charged to report on the relative scheme for a law presented to parliament at the session of 6 December 1916 by the Minister of Posts and Telegraphs (Fera) *Atti parlamentari*, No. 686-A.

or fiscal burden will be placed on the operations or the documents involved by this system. Correspondence between those benefiting by it and the administration will be free of postage.

Available funds will be paid into a current account which will bear interest to the deposit and loans fund at a rate corresponding to the average annual interest which this fund receives from the aggregate capital it administers.

Of annual net profits two tenths will go to the formation of a reserve fund within the fund just mentioned and administered thereby. The remaining eight tenths will be paid to the *Opera nazionale per la protezione e l'assistenza degli invalidi della guerra* (National Enterprise for the Protection and Assistance of Invalids of the War).

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2. THE PROVINCIAL FUND OF AGRICULTURAL CREDIT FOR BASILICATA IN 1916. Report on the year 1916. Potenza, 1917.

Pursuing our examination of the activity in 1916 of the chief institutions of agricultural credit in Italy (1), we find some data as to the business done in that year by the provincial funds of agricultural credit for Basilicata.

Credit afforded during the year by means of the Monti Frumentari, the agricultural funds and the agricultural consortia for seeds, manures, fertilizers, expenses of sowing, harvest, cultivation, live and other stock. Total turnover 3,611 bills for 1,297,316 liras (average 359 liras a bill) as against 2,755 bills for 1,080,855 liras at the end of 1915. The turnover of the current accounts was 87,586 liras. The balance in bills on 31 December 1916 was 622,102 liras as against 548,382 liras in 1915.

Direct credit to individuals regulated by the royal decree of 11 October 1914, No. 1089 (2). — Total turnover 651 bills for 699,385 liras as against 712 bills for 828,140 liras in 1915. The balance in bills on 31 December 1916 was 346,568 liras.

Loans to those who suffered losses by fieldmice. — Requests for seed for 23,191 hectares (3) covered 2,499,148 liras, of which 1,763,904 liras were paid on 2,452 bills.

Credit for acquisition of live stock. — Current accounts relative to this form of credit fell from 23,285 liras at the end of 1915 to 16,919 liras at the end of 1916, and the bills in hand were reduced from 375 for 609,857 liras to 326 for 570,147 liras. The diminution of business of this kind is essentially a consequence of the requisition of live stock and of previous bad years.

Credit for agricultural improvements. — In this category there were 100 loans amounting to 750,932 liras, of which 28,750 liras were for water-con-

(1) See our issues for August and September 1917.

(2) See our issue for January 1915.

(3) 1 hectare = 2.47 acres.

ducts, 106,060 liras for modern stables, 278,822 for settlers' houses, 337,000 liras for settlers' houses and modern stables. Eighty-four loans for 621,560 liras are in course of amortization. As regards their term, 48,300 liras fall due in from five to fifteen years, 365,150 liras within twenty years, 38,500 liras in from twenty-five to thirty years, 186,884 liras within thirty-five years, and 112,088 liras in from forty to fifty years. The normal term is twenty years, the maximum term thirty-five years.

Loans for plantations and reafforestation amounted to 9,331 liras at the end of 1915 and fell to 9,133 liras at the end of 1916. Loans for irrigation amounted to 30,095 liras, and loans for hedges remained at the same level as on 31 December 1915, namely 1,305 liras.

The capital of this institution — the true capital and the emergency and reserve funds — reached 1,915,910.66 liras, to which 145,050.31 liras of the net profits of the previous year must be added, making a total of 2,060,951.97 liras.

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3. THE "FEDERAZIONE PER IL CREDITO AGRARIO NELL'UMBRIA". — Report of federal council for 1916. Perugia, 1917.

The law of 2 January 1910, No. 7, on agricultural credit in Marche and Umbria (1) institutes in each of these regions a federation formed by the agricultural funds and discounting institutions (savings-banks and co-operative banks) which exist there and are spontaneously associated. Such a federation is called upon to administer the fund destined by the same law for the exercise of agricultural credit, a fund which amounts to 700,000 liras for Marche and 400,000 liras for Umbria. It behoves this fund in particular to provide for the endowment of agricultural funds and the temporary employment of capital not yet bestowed on such an object. We now learn from the report of the federal council of the Umbrian federation that on 31 December 1916 the agricultural funds active in Umbria numbered thirteen. In that year their discount and loans business covered the sum of 401,448.03 liras and left them a balance of 169,137.15 liras on 31 December. The sum of 290,368.03 liras had gone to provide manures, 83,567 liras for stock, implements and machinery, 16,850 liras for fertilizers, 7,795 liras for cultivation, 2,250 liras for seeds and 618 liras for the harvest.

UNITED STATES.

1. THE ACTIVITY OF THE FEDERAL LAND BANK OF ST. LOUIS. — *The Country Gentleman*, Vol. LXXXII, No. 16, Philadelphia, 17 November 1917.

The Federal Land Bank of St. Louis has the function of providing credit for the farmers of three States — Missouri, Illinois and Arkansas. It

(1) For the regulation of agricultural credit in Marche and Umbria see the article in our issue for June 1915, page 77.

was founded in virtue of the federal law of 17 July 1916 on agricultural credit, and within six months it issued and sold \$1,000,000 worth of bonds based on mortgages which it held as security for loans to farmers of the States named.

It also has on file fully examined applications for additional loans amounting \$3,000,000, and applications not yet fully examined for about \$10,000,000. The manager believes that the bank's loans to farmers in the district will aggregate \$40,000,000 in the course of a few years.

Charts showing the productivity of the land in every county of the district and the general characteristics of the soil have been prepared. From these the bank's officials can obtain information as to crops, live stock, dairy production, the value of farm improvements, schools, churches, roads.

In order to teach farmers their own needs and opportunities the bank has decided to form an educational department. The hope is that such an organization will be perfected as will give to every borrower the practical help needed to make his farming methods and the management of his farm thoroughly efficient.

The methods followed in granting loans are themselves as educational as they are practical, a fact made clear by the following example. An Arkansas farmer applied to the Federal Bank of St. Louis for a loan of \$1000, of which half was to build a barn and half pay for tilling. The bank sent an expert to appraise and survey the farm, and shortly afterwards the applicant received from the bank a letter which was substantially as follows :

" Our survey of your farm indicates that it would not be to your best interest to lend you \$500 to build a barn. Your land is worn out. You are not producing enough to fill the barn you have. Our report shows that you need fertilizers and drainage. We are willing to lend you \$500 to buy phosphates or limestone to build up your land and \$500 for tilling. We believe that you can use \$1,000 profitably in that way and double the yield of your farm. We have therefore approved of your application for the loan provided you use the money as we have suggested. When you put your land in condition to produce what we think it is capable of producing we shall be glad to consider your application for additional money to build a barn ".

Thus the bank extends practical as well as financial help to the farmers of the St. Louis districts, and the reports of the bank's " field men " show that the farmers lack practical methods as much as money. In particular this fact is proved by reports from some parts of Arkansas and Southern Missouri, which speak of exhaustion of land due to no rotation of crops and to a lack of proper fertilizers, of mere sheds serving as barns, of houses hardly fit for habitation, and of neighbourhoods which have unimproved roads and inadequate schools and churches. In many cases the bank has recommended that applicants for loans build suitable houses instead of using the money they borrow to buy live stock or clear additional land.

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2. THE CALIFORNIA FEDERATION OF FARMERS' CO-OPERATIVE MARKETING ASSOCIATIONS. — *California Fruit News*, Vol. 56, No. 1520, San Francisco, 27 October 1917

At a meeting held last October in the offices of the State Market Director in San Francisco the final organization was effected of the California Federation of Farmers' Co-operative Marketing Associations. The associations which joined it were the California Prune and Apricot Growers, the California Associated Olive Growers, the California Peach Growers, the California Associated Raisin Company, the Central California Berry-growers' Association, the Sebastopol Apple Growers' Union, the Poultry Producers of Central California and the Poultry Producers of Southern California. Several associations are still considering the advisability of joining and it is expected that some of them will decide in favour of doing so. They are the Rice Association, the Dairy Association, the Almond Exchange, the Walnut Association, the California Fruit Exchange and the California Fruit Growers' Exchange. The Market Director states that the Citrus Exchange wishes to keep in touch with the federation but to remain outside it for the present.

The Market Director intimates that the following are the objects of the federation, which is managed by an executive committee :

" To secure co-operation on all problems of common interest.

" To secure an interchange of thoughts, ideas and experiences.

" To secure collective data on forms of organization and the dissemination of information relative to laws proposed and adopted, opinions and judgements of courts, commissions and tribunals involving the scope and limitation of the activities of co-operative marketing associations.

" To develop plans for the further elimination of waste in the cost of distribution of products.

" The joint employment of brokers or salaried agents at Eastern marketing points.

" The joint employment of an all-year-round sales organization for the American home markets for the various California farm products, in their respective seasons, to be handled through the established channels or otherwise.

" The joint employment of demonstration organizations to aid, encourage and educate the retail dealers throughout the country to specialize on California food products.

" Joint effort in national publicity and educational advertising.

" Development of foreign markets by the joint creation of foreign-sales organizations.

" To suggest and carry out plans for more favourable State and Federal legislation in the proper interest of California farm products.

" Favourable Federal tariffs affecting California farm products and joint opposition against the enactment of possible harmful or unfair tariffs.

“ To develop plans for the collective purchase and production of supplies used by all or several of the associations.

“ To develop plans for co-operation in securing proper transportation and proper transportation rates and facilities.

“ To develop plans for securing financial accommodations in the primary financial markets at the lowest possible interest rates.

“ To develop plans for creating and maintaining a labour bureau or other methods for handling the labour problems of farmers and marketing associations.

“ To suggest and do any and all proper things which, at any time or place, may be advantageous and beneficial to co-operative marketing associations in general and to the member associations in particular ”.

Part IV: Agricultural Economy in General

CANADA.

COLD STORAGE IN CANADA.

OFFICIAL SOURCE :

REPORT OF INVESTIGATION INTO COLD STORAGE IN CANADA UNDER THE ORDER IN COUNCIL OF NOVEMBER 10, 1916 in *The Labour Gazette* issued by the Department of Labour, Ottawa, August 1917.

§1. GENERAL CONDITION OF THE BUSINESS OF COLD STORAGE.

About half the meat killed in Canada, and about one fifth of the total quantity of eggs, as much of the butter and a third of the cheese produced in the dominion are subjected to cold storage during their passage from producer to consumer. The trade in meat, eggs and dairy produce and their distribution are therefore controlled to an important extent by the owners of warehouses for cold storage.

a) *Distribution of Refrigerated Space among Different Kinds of Companies.* — Altogether there are in Canada about 110 of these warehouses. They belong to seventy-six different companies, two of them to American companies. Of the seventy-six companies seven conduct only one establishment each; and five are large exporting houses which own altogether nine cold storage establishments and export chiefly dairy produce, and each of which has at least one branch in Montreal. Of those twelve of the companies which deal chiefly in fish two own two establishments each, the others one each. Thirty-nine of the warehouses store general produce, including meat, dairy produce, eggs and fish, in proportions varying with their situation. One of these is affiliated to a slaughterhouse company, known in Canada as an *abattoir* company, but the other thirty-eight are independent.

Of a total of more than 24,000,000 cubic feet of refrigerated space about 12,200,000 are held by the *abattoir* companies, 2,650,000 by the exporting houses dealing in dairy produce and eggs, 2,250,000 by the fish companies and 7,200,000 by the companies having warehouses for general cold storage.

The greatest area for cold storage is therefore owned by the abattoir companies. These are most completely organized. They buy live stock in the centres most conveniently supplied, kill it in their own slaughter-houses, manufacture the by-products elaborately and efficiently and preserve the whole in their refrigerated warehouses. Thus they can keep dressed meat as an article of trade longer than the local butcher, and supply the home or the foreign market as opportunity arises. Three of these huge companies control trade still further, for they have retail branches in the larger cities to which they consign about 40 per cent. of the merchandise they sell for home consumption, allowing these branches a slight reduction on cost. One of these latter companies has about forty and another about eighty of such retail stores. As retailers the abattoir companies have an immense advantage over small butchers because they can so easily manufacture by-products. They ought in consequence to allow for a smaller margin of profit when selling, and to be able to pay a higher price to the producer, but the investigation under the order-in-council of 10 November 1916 has not shown that either of these consequences has been realized.

The abattoir companies have a secondary but considerable trade in butter, cheese, eggs and fish.

b) *Distribution of Refrigerated Space among Public and Private Establishments.* — The cold storage warehouses, owned by the various kinds of companies which have been mentioned, belong to the three classes of public and subsidized, public but not subsidized, and private warehouses. In theory a public warehouse is one which stores goods belonging to the general public, a private warehouse one which itself trades in the goods it stores. In fact however almost all the so-called "private" warehouses are to some extent "public", and the report of the investigation gives one instance of a large "public" warehouse which derives almost its whole profit from its own trade.

The plan of subsidizing these warehouses was instituted in 1907 by the Canadian Department of Agriculture to meet a necessity for more space for public storing. The government makes to newly organized cold storage establishments a total grant of 30 per cent. of the cost of construction, 15 per cent. being paid in the first year, 7 per cent. in the second, 4 per cent. in the third, 2 per cent. in the fourth and 2 per cent. in the fifth. A warehouse thus subsidized is required by law to store goods for others than its owners on request. The grant has been completely paid to twenty-five warehouses; and eight have already received instalments thereof amounting to \$132,539, while \$20,953 are still due to them. Only three of the subsidized warehouses limit themselves to storing for the outside public. The others contend that their warehouses are not sufficiently used by the public and do not thus yield them a sufficient income to enable them to meet their expenses without also themselves trading in the stored commodities.

Out of the total refrigerated area of more than twenty-four million cubic feet 3,823,780 cubic feet belong to the public and subsidized warehouses, 6,505,804 cubic feet to the public but not subsidized warehouses,

and 13,800,000 cubic feet or more than half to the so-called private warehouses.

In 1916 the total amount of produce handled by the subsidized companies was more than 84,000,000 pounds, of which 12 per cent. was stored for others. In the same year the public but not subsidized warehouses handled about 85,000,000 pounds, of which 18 per cent. was stored for others. The exact amount of produce stored in 1916 in warehouses of these two classes by others than the firms which occupied them was slightly over 24,000,000 pounds. But the total quantity of produce placed in 1916 in cold storage warehouses not belonging to its owners was about 88,000,000 pounds. It follows that 64,000,000 pounds or 73 per cent. of the total quantity owned by the outside public were stored by the so-called private companies, which therefore can certainly not be said to deserve their name. It may be, however, that a considerable share of this amount belonged to companies owning cold storage warehouses who stored it outside their own premises.

§ 2. FUNCTIONS OF THE BUSINESS OF COLD STORAGE.

The original and essential function of a cold storage warehouse is the preservation of food but in Canada this has come to occupy a second place. In Canada these warehouses are concerned with: 1) the purchase of food-stuffs from the producers, 2) their preparation and preservation, 3) their distribution in *a*) the home and *b*) the foreign market.

Canada's export trade in products which have been in cold storage is practically limited to four or five large meat companies and three or four large firms exporting cheese and other dairy produce. This export trade, which has attained to immense proportions since the outbreak of war, has greatly increased the capital and strengthened the organization of the companies concerned in it. But it has made of the home consumer, although he lives in a land of plenty, a buyer who competes with a hungry world.

Table I. shows the comparative positions of the home and the export trade in meat, eggs and dairy produce.

According to the estimates of the Agricultural Department the annual home consumption of butter in Canada is 27 pounds a head, that of cheese 2 1/2 pounds a head and that of eggs 17.3 dozen a head.

The commission appointed by the United States Department of Agriculture to inquire into the general situation as regards the meat supply reported that in 1900 the consumption per head of the Canadian population was 54 pounds of beef, 11 pounds of mutton and lamb and 44 pounds of pork; while in 1911 it was 61 pounds of beef, 9 pounds of mutton and lamb and 67 pounds of pork. The consumption of pork therefore increased proportionately more than that of beef. That it continued to do so after 1911 might be concluded from the circumstance that 325,000,000 pounds of pork and only 295,000,000 pounds of beef passed through the

government inspected slaughterhouses in 1916 ; but it must be remembered that there was a contemporaneous increase in the exports of fresh pork. In 1913 the cold storage companies exported only about 2 per cent. of the total quantity of fresh pork they sold and 24 per cent. of the bacon ; in 1916 they exported 26 per cent. of their fresh pork and 91 per cent. of their bacon. Of the ham sold by them they exported less than 1 per cent. in 1915 and about 15 per cent. in 1916. The figures in column 2 of Table I are not accurate but they are approximate and serve for comparison.

The table shows that about one fifth of the butter produced in Canada, more than a third of the cheese and about a fifth of the eggs passed through cold storage. The fraction of the beef killed in government inspected slaughterhouses which did so was about two thirds. Fresh pork converted into bacon and ham loses about 10 per cent. of its weight. If allowance be made for this fact it appears that the total weight of the pork, bacon and ham in cold storage approximated to that of all the pork killed in government inspected slaughterhouses. About half the quantity of mutton and lamb so killed passed through cold storage.

Practically the whole export of meat comes from the large abattoir companies. Probably about forty-five of the forty-seven million pounds of cheese mentioned in column 21, as stored in warehouses not the property of the storers, belonged to wholesale dealers or cold storage firms owning other warehouses, and were intended to be exported.

The grocers and butchers of the larger cities depend greatly on the abattoir and other cold storage companies for their supplies of butter, eggs, cheese and meat. This means that these companies have to a marked extent assumed the task of feeding the larger industrial and commercial centres of Canada. In the course of the investigation under the order-in-council invoices were secured from all the more important grocers in the largest towns of the dominion. It was discovered that they bought directly from the cold storage companies practically all the bacon and ham they sold, a large proportion of the cheese, about half the butter, and, between October and April, a large proportion of the eggs. Their other sources of supply were the creameries for butter, the wholesale dealers and in a few cases the cheese factories for cheese, and the wholesale dealers and the farmers for eggs. Really fresh eggs are necessarily bought from farmers, but in one case a grocer of good standing in Toronto bought his "fresh laid eggs" from a cold storage company. These companies have lately undertaken to supply dealers with the most expensive kinds of meat, butter, cheese and eggs, and this branch of their business is growing rapidly. Some of them now manufacture fancy cheeses and do a well established trade in them.

§ 3. PROFITS OF THE COLD STORAGE COMPANIES.

In the course of the investigation question-forms were sent to the various companies asking in the case of each for sworn testimony as to :

TABLE I.

Commodity	Total production of cheese and eggs (7) total quantity of meat (dressed weight) killed in government slaughterhouses (2) 1 Jan-1 Dec. 1916	Estimated Home Consumption (3)	Total quantity bought by cold storage companies and total cost when warehoused		Average cost per pound	Total quantity sold and amount for which sold (12)		Average selling price per lb. or dozen	Margin per lb. or doz. (4)	Quantity sold for export from Canada according to the Trade and Commerce Returns (11)	
	1	1 a	2	3	4	5	6	7	8	9	10
	lbs. or doz.	lbs. or doz.	lbs. or doz.	\$	cents	lbs. or doz.	\$	cents	cents	lbs. or doz.	cents
Butter	224,000,000	216,000,000	46,561,063	14,358,100	30.83	43,867,720	14,359,430	32.73	1.90	7,670,270	38.20
Cheese	202,000,000	20,000,000	76,806,324	13,908,000	18.11	72,638,890	13,713,058	18.88	0.77	157,768,702	19.10
Eggs	145,000,000	138,400,000	28,122,683	7,326,214	20.05	26,410,119	8,018,002	30.36	4.31	4,504,463	31.40
Beef	295,823,000	484,000,000	189,952,154	20,425,417	10.75	170,472,195	19,322,000	11.45	0.70	10,998,879	12.80
Fresh Pork	—	—	113,125,331	10,789,800	15.76	69,629,564 ⁽¹⁰⁾	10,909,167	15.67	0.83	—	—
Smoked Pork	—	—	45,723,503	7,009,367	15.33	54,056,692	9,927,020	18.36	3.03	—	—
Pork	325,636,000	536,000,000	158,848,834	23,799,167	15.00	123,686,256	20,836,181	16.85	1.85	12,005,270	14.10
Bacon	—	—	125,605,834	19,795,010	15.76	151,309,429	30,787,823	20.34	4.58	164,101,293	10.10
Ham	—	—	14,383,485	2,761,676	19.20	14,390,367	3,067,809	21.32	2.11	3,858,032	16.10
Mutton and lamb	28,956,000	13) 72,000,000	13,609,605	2,286,939	16.80	12,666,380	2,205,229	17.41	0.61	183,601	14.10

(1) Estimation based on the exports plus the estimated *per capita* consumption and the figures of the last decennial census. The population in 1910 taken to have been eight millions. — (2) This includes practically all the live stock killed in government inspected slaughterhouses and represents, according to the estimates of the Agricultural Department, about half the live stock killed in Canada. — (3) The figures for butter, cheese and eggs are reached by taking the *per capita* consumption estimated by the Agricultural Department for butter, cheese and eggs and multiplying it by eight millions. The figures regarding meat in this column are based on the *per capita* consumption of beef, pork and mutton and lamb estimated by the commission appointed by the Agricultural Department of the United States who reported in 1916. — (4) This is the difference between the average selling price and the average cost price including all expenses of storing, over head charges, loss and profit. — (10) A large percentage of the fresh pork bought was converted into bacon, ham and smoked pork and sold as such. — (11) This includes sales made by all dealers of all kinds in Canada. — (12) Where the quantity sold exceeds that bought the excess partly represents the quantity on hand at the beginning of the year. — (13) 72,000,000 lbs. are probably more than the actual weight consumed for the consumption of mutton and lambsens to be decreasing.

TABLE I. (continued).

Commodity	Quantity sold for export by the cold storage companies of Canada (9)			Average selling price per pound		Margin per pound or doz. (5)		Quantity sold for home consumption by the cold storage companies in Canada			Average selling price per lb. or doz. (6)		Margin per lb. or doz.		Quantity available for consumption 1916		Quantity received into storage during 1916		Goods stored in cold storage warehouses by others than the firms operating these warehouses (14)	
	lbs. or doz.	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Butter . .	5,241,297	1,646,297	31.40	0.57	29,376,287	9,750,405	33.18	2.35	8,824,657	7,277,948	10,494,659	4,710,977	3,669,093							
Cheese . .	55,942,457	10,373,101	18.54	0.43	15,536,524	3,206,290	20.64	2.53	4,067,910	4,731,118	47,995,774	6,803,571	3,346,613							
Figs . .	6,957,522	2,036,058	33.61	6.56	16,314,677	4,877,425	21.84	3.79	6,515,188	2,623,436	5,708,118	4,836,340	1,703,948							
Beef . .	13,885,286	1,381,227	9.94	70.81	110,104,060	12,386,520	11.25	0.50	6,793,916	31,537,160	16,970,038	657,858	8,568,028							
Fresh pork	24,904,787	4,191,410	16.83	3.68	47,007,346	7,400,648	15.74	0.90	13,560,032	9,455,700	1,623,622	378,122	144,582							
Smoked																				
Pork . .	7,164,306	1,378,750	19.24	3.91	26,673,188	5,220,908	19.57	4.24	7,782,791	7,357,657										
Bacon . .	32,069,093	5,570,168	17.37	2.37	8,733,680,534	12,621,556	17.13	2.13												
	136,890,648	27,723,928	20.25	3.68	12,537,254	2,461,899	19.66	3.09	5,818,464	8,812,385										
Ham . .	2,111,764	355,169	16.82	72.38	10,483,628	2,403,881	22.93	3.73	815,703	1,236,716										
Mutton																				
and lamb	45,400	7,634	16.81	0.01	12,003,446	2,088,283	17.39	0.59	646,917	2,108,057	1,576,285	13,255	840,259							

(5) This is the difference between the average cost price per pound or dozen and the average selling price for export. — (6) This is the difference between the average cost price and the average selling price for home consumption. — (7) This does not represent a loss as much meat sold for export in 1916 was bought in 1915 when the average cost of cold storage warehouses was lower than in 1916. — (8) This includes some smoked pork and bacon, which had very similar prices. (9) The sum of the quantities sold for export and home consumption will be seen not to equal the total quantity sold. This is because many cold storage companies could not state whether they sold for export or home consumption. — (14) These columns should be read with column 2 to reach the quantity of produce stored, but it must be remembered that some of those who thus stored in premises not their own were themselves cold storage companies, and that the categories of merchandise in column 2 and in columns 21, 22 and 23 are not therefore mutually exclusive.

a) the quantity of each commodity bought during the year; *b)* its cost when stored, including charges for freight and unloading; *c)* the total quantity thereof sold and the total amount for which it sold. From the data thus obtained the average cost and selling prices were computed. The difference between the two, which the investigators call the "margin", represents the cost of storing, losses, interest on the investment, extra charges, other expenses in which a commodity may involve the cold storage company, and finally the company's profit.

Since 1913 the margin on butter has increased by 2 cents a pound, that on cheese by 0.35 cents a pound and that on eggs by 0.96 cents a dozen. On beef it has decreased by 0.12 cents a pound and on ham by 0.76 cents a pound, while on bacon it has increased by 2.25 cents a pound.

Table II shows in detail for the ten largest cold storage companies the quantities they bought and sold, their average buying and selling prices, and their margins, as regards butter, eggs, cheese, beef, fresh and salt pork, bacon, ham, mutton and lamb: The table does not specify costs of storage. It is believed that there should be a special inquiry into the value of the by-products of meat, and that a fixed system of keeping accounts of storage and other costs on particular commodities should become compulsory. At present these charges are arbitrarily fixed and levied by the different companies. Possibly a legal scale of charges might be established with the system of account-keeping.

The investigation discovered that in 1916 prices in the home market exceeded those in the export market by 1.82 cents per pound of butter, 2.14 cents per pound of cheese, 1.24 cents per pound of beef and 6.11 cents per pound of ham; but fell below the prices in the export market by 3.76 cents per dozen eggs, 1.08 cents per pound of pork, and 0.48 cents per pound of bacon.

Eggs. — Table II shows that Company No. 9 sold 5,556,605 dozen eggs at a margin of 7.27 cents a dozen. One branch of this company bought about four million dozen eggs in 1916 at an average cost of 24.8 cents a dozen and sold three and a half million dozen at an average price of 34.7 cents a dozen. In the same year a neighbouring cold storage company bought about 500,000 dozen eggs at 24.4 cents and sold them at 36.3 cents a dozen. If these two abnormal transactions be excluded the average margin of the other eight companies is found to be not 4.3 but 3.6 cents on a dozen eggs. The turnover in the business is so enormous that the investigators considered that this profit was probably still excessive. Of twenty-six million dozen eggs sold by all the cold storage companies of Canada in 1916 the seven large abattoir companies sold seventeen and a half million dozen. The average margin of the ten companies is 4.57 cents; that of the seven abattoir companies 4.67 cents, or 0.36 cents higher than that of all the cold storage companies, and the latter would be much lower without the contribution of the abattoir companies. Three companies alone sold about fourteen million dozen eggs or about 53 per cent. of the total output of the cold storage companies.

Butter. — Of the forty-four million pounds of butter sold in 1916 by

the cold storage companies twenty-nine millions were sold by the ten large companies specified, five and a half millions by one company alone, five by another and four and a half by yet another. The great abattoir houses sold twenty-two out of the forty-four millions. Their general average margin is higher than that of the export houses but lower than that of all the cold-storage companies. Of butter only is this latter circumstance true.

Cheese. — Two companies alone sold over fifty million of the total seventy-two million pounds of cheese sold by all the cold storage companies of Canada in 1916. Forty-nine out of these fifty million pounds were exported. These two companies therefore virtually monopolized the cold storage of cheese for export. Company No. 10, the larger of the two, shows a very moderate profit, much lower than the average for all the cold storage companies of Canada. No. 8, the smaller, shows a lower cost price, and a higher margin due to the larger proportion of its cheese which it sold for home consumption. Some of the more important cheese dealers state that for a short time cheese factories and produce dealers attempted to carry on their own export trade without the intervention of these two companies, but found that they received better remuneration by dealing through them. The average selling price for export of Company No. 10 in 1916 was 18.37 cents a pound and that of No. 8 was 18.96 cents. Another cheese company in the central part of Southern Ontario sold 9,870,064 pounds of cheese in 1916, the bulk for home consumption. Thus three companies sold sixty and a half million pounds of cheese out of the seventy-two and a half million pounds sold by all the cold storage companies in Canada.

Beef. — The centralization of the beef trade in the hands of a few companies is even more marked than that of the trade in eggs and dairy produce. Of the 170 million pounds of beef which passed through cold storage last year 124 million were sold by the seven large abattoir companies, ninety-nine and a half million pounds were sold by three companies only, and nearly 112 million pounds by four companies only. Of the total 189 million pounds bought by all the cold storage companies more than sixty millions were sold by branches of American companies, at a smaller profit than the Canadian houses and almost entirely for consumption in Canada. The margin of the largest company, namely No. 4, is lower than the general margin, but the average margin of the four largest companies taken together is considerably higher than the general margin. This latter circumstance is consistent with what is found in the case of other commodities.

Bacon — Company 9 sold, at a margin of 5.05 cents a pound, ninety-seven millions out of the total 151 million which passed through cold storage in 1915. At least ninety-four out of these ninety-seven millions were intended for export. In 1915 the same company sold fifty-seven and a half million pounds at a margin of 3.67 cents: there was no evidence of an increase in the storage or other costs to account for the rise on this earlier margin which the investigators found to have been "sufficient, satisfactory and profitable". Companies 5 and 9 together sold 140 millions of the 150 million pounds of bacon sold in 1916 by all the cold storage compa

TABLE II.

	Butter				Eggs				Cheese			
	Lbs.	\$	Average cents	Margin cents	Dozens	\$	Average	Margin	Lbs.	\$	Average cents	Margin cents
Company 1 Bought	2,276,126	969,794	29.60	3.18	1,514,340	435,301	28.74	1.82	757,232	148,011	19.54	
" Sold	2,930,804	960,831	32.78		1,383,531	422,837	30.56		654,954	140,955	21.52	1.98
" 2 Bought	5,162,576	1,537,564	29.78	3.06	5,989,121	1,619,852	27.04	3.47	1,810,458	300,374	16.50	2.6
" Sold	5,024,287	1,650,102	32.81		5,896,200	1,799,427	30.51		1,707,056	337,515	19.10	
" 3 Bought	482,705	145,391	30.12	3.23	297,032	77,150	25.97	5.38	74,393	14,255	19.16	1.7
" Sold	449,670	149,979	33.35		244,932	76,794	31.35		76,923	16,048	20.86	
" 4 Bought	4,175,090	1,290,482	30.90	0.92	2,801,935	715,940	25.55	3.95	3,925,154	769,539	19.60	0.36
" Sold	3,890,631	1,241,053	31.82		2,606,199	766,205	29.4		3,788,590	756,390	19.96	
" 5 Bought	2,622,427	797,608	30.41	1.7	1,908,207	500,381	26.22	3.66	517,710	90,608	17.50	1.40
" Sold	2,610,025	838,354	32.11		1,707,115	510,103	29.88		498,404	94,219	18.90	
" 7 Bought	397,048	129,001	34.75	0.09	182,490	51,438	28.18	1.74	226,165	39,896	17.64	less 2.06
" Sold	283,842	98,380	34.66		77,430	23,161	29.92		37,881	5,992	15.58	
" 8 Bought	1,585,192	517,214	32.62	less 0.37	—	—	—	—	16,691,305	2,987,296	17.89	2.55
" Sold	1,605,240	529,671	32.99		—	—	—		15,056,975	3,078,572	20.44	
" 9 Bought	6,083,508	1,890,380	31.07	0.44	6,413,673	1,613,438	25.15	7.27	2,632,018	401,455	17.32	1.15
" Sold	5,547,768	1,748,616	31.51		5,566,505	1,804,948	32.42		2,489,351	461,890	18.67	
" 10 Bought	5,037,366	1,656,708	32.88	0.96	—	—	—	—	37,704,501	6,838,656	18.13	0.28
" Sold	4,541,071	1,536,746	33.84		—	—	—		35,669,173	6,565,617	18.41	
" 11 Bought	1,349,983	442,225	32.75	2.63	1,622,200	429,144	26.46	3.44	581,074	123,319	21.22	2.17
" Sold	1,285,712	454,959	35.38		1,549,889	463,509	29.90		700,495	133,450	19.05	
Total for Allatours	22,860,298	6,951,038	30.40	1.79	19,105,898	5,013,500	26.24	4.67	9,953,731	1,831,128	18.4	1.11
Total for Export Houses	21,576,359	6,945,029	32.19		17,481,941	5,403,475	30.91		9,253,098	1,816,318	19.54	
Total for Export of 10 companies	8,027,208	2,945,029	32.79	1.11	1,622,200	429,144	26.45	3.46	54,979,930	9,939,271	18.08	0.93
Total for all Cold Storage Ware-houses in Canada	7,486,600	2,538,234	33.90		1,549,889	463,510	29.01		51,425,743	9,778,639	19.01	
Bought	30,887,396	9,583,197	31.02	1.6	20,728,098	5,442,644	26.25	4.57	64,593,661	11,770,409	18.22	0.87
Sold	29,063,027	9,482,263	32.62		19,031,830	5,866,985	30.82		60,718,841	11,594,967	19.09	
Bought	46,561,063	14,358,160	30.83	1.9	28,122,083	7,326,214	26.05	4.31	76,806,324	13,908,000	18.11	0.78
Sold	43,867,720	14,359,430	32.73		26,410,199	8,018,002	30.36		73,638,890	13,713,053	18.89	

TABLE II (continued).

Company	Beef				Fresh Pork				Salt Pork			
	Lbs.	\$	Average cents	Margin cents	Lbs.	\$	Average cents	Margin cents	Lbs.	\$	Average cents	Margin cents
1 Bought	31,945,941	3,283,298	10.26	1.73	139,600	20,139	15.42	1.19	18,953,937	2,803,569	15.10	0.73
2 Bought	29,592,449	3,549,762	11.99	1.70	136,092	22,617	16.61	—	18,903,781	2,002,646	15.83	—
3 Bought	14,521,107	1,447,374	9.90	—	—	—	—	—	24,985,551	3,594,973	14.39	4.85
4 Bought	12,480,073	1,466,525	11.75	0.80	—	—	—	—	18,959,915	3,599,386	19.24	—
5 Bought	1,711,848	188,324	11.00	—	1,541,781	2,205,952	13.35	1.00	—	—	—	—
6 Bought	1,031,486	194,031	11.89	0.63	1,573,518	2,415,568	15.34	2.20	15,300,416	2,725,513	17.81	0.00
7 Bought	57,573,031	5,654,515	9.82	6.55	38,688,900	5,572,178	14.40	1.22	13,863,803	2,810,136	17.90	—
8 Bought	53,416,434	5,582,336	10.45	—	20,187,800	4,573,030	16.69	—	—	—	—	—
9 Bought	7,251,850	753,832	10.39	—	8,321,051	1,236,495	14.75	—	—	—	—	—
10 Bought	7,049,632	841,049	11.94	less 0.21	8,109,795	1,205,207	15.97	—	—	—	—	—
11 Bought	4,337,176	492,555	11.36	—	17,783,900	2,728,485	15.31	1.16	—	—	—	—
12 Bought	3,887,541	433,383	11.15	—	11,149,896	1,840,714	16.50	—	—	—	—	—
13 Bought	—	—	—	—	—	—	—	—	—	—	—	—
14 Bought	—	—	—	—	—	—	—	—	—	—	—	—
15 Bought	—	—	—	—	—	—	—	—	—	—	—	—
16 Bought	22,232,988	2,373,421	10.67	0.97	8,602,511	1,295,069	15.05	1.22	—	—	—	—
17 Bought	16,514,231	1,923,124	11.64	—	8,732,616	6,072,477	16.27	—	—	—	—	—
18 Bought	—	—	—	—	—	—	—	—	—	—	—	—
19 Bought	—	—	—	—	—	—	—	—	—	—	—	—
20 Bought	—	—	—	—	—	—	—	—	—	—	—	—
21 Bought	—	—	—	—	—	—	—	—	—	—	—	—
22 Bought	—	—	—	—	—	—	—	—	—	—	—	—
23 Bought	—	—	—	—	—	—	—	—	—	—	—	—
24 Bought	—	—	—	—	—	—	—	—	—	—	—	—
25 Bought	—	—	—	—	—	—	—	—	—	—	—	—
26 Bought	—	—	—	—	—	—	—	—	—	—	—	—
27 Bought	—	—	—	—	—	—	—	—	—	—	—	—
28 Bought	—	—	—	—	—	—	—	—	—	—	—	—
29 Bought	—	—	—	—	—	—	—	—	—	—	—	—
30 Bought	—	—	—	—	—	—	—	—	—	—	—	—
31 Bought	—	—	—	—	—	—	—	—	—	—	—	—
32 Bought	—	—	—	—	—	—	—	—	—	—	—	—
33 Bought	—	—	—	—	—	—	—	—	—	—	—	—
34 Bought	—	—	—	—	—	—	—	—	—	—	—	—
35 Bought	—	—	—	—	—	—	—	—	—	—	—	—
36 Bought	—	—	—	—	—	—	—	—	—	—	—	—
37 Bought	—	—	—	—	—	—	—	—	—	—	—	—
38 Bought	—	—	—	—	—	—	—	—	—	—	—	—
39 Bought	—	—	—	—	—	—	—	—	—	—	—	—
40 Bought	—	—	—	—	—	—	—	—	—	—	—	—
41 Bought	—	—	—	—	—	—	—	—	—	—	—	—
42 Bought	—	—	—	—	—	—	—	—	—	—	—	—
43 Bought	—	—	—	—	—	—	—	—	—	—	—	—
44 Bought	—	—	—	—	—	—	—	—	—	—	—	—
45 Bought	—	—	—	—	—	—	—	—	—	—	—	—
46 Bought	—	—	—	—	—	—	—	—	—	—	—	—
47 Bought	—	—	—	—	—	—	—	—	—	—	—	—
48 Bought	—	—	—	—	—	—	—	—	—	—	—	—
49 Bought	—	—	—	—	—	—	—	—	—	—	—	—
50 Bought	—	—	—	—	—	—	—	—	—	—	—	—
51 Bought	—	—	—	—	—	—	—	—	—	—	—	—
52 Bought	—	—	—	—	—	—	—	—	—	—	—	—
53 Bought	—	—	—	—	—	—	—	—	—	—	—	—
54 Bought	—	—	—	—	—	—	—	—	—	—	—	—
55 Bought	—	—	—	—	—	—	—	—	—	—	—	—
56 Bought	—	—	—	—	—	—	—	—	—	—	—	—
57 Bought	—	—	—	—	—	—	—	—	—	—	—	—
58 Bought	—	—	—	—	—	—	—	—	—	—	—	—
59 Bought	—	—	—	—	—	—	—	—	—	—	—	—
60 Bought	—	—	—	—	—	—	—	—	—	—	—	—
61 Bought	—	—	—	—	—	—	—	—	—	—	—	—
62 Bought	—	—	—	—	—	—	—	—	—	—	—	—
63 Bought	—	—	—	—	—	—	—	—	—	—	—	—
64 Bought	—	—	—	—	—	—	—	—	—	—	—	—
65 Bought	—	—	—	—	—	—	—	—	—	—	—	—
66 Bought	—	—	—	—	—	—	—	—	—	—	—	—
67 Bought	—	—	—	—	—	—	—	—	—	—	—	—
68 Bought	—	—	—	—	—	—	—	—	—	—	—	—
69 Bought	—	—	—	—	—	—	—	—	—	—	—	—
70 Bought	—	—	—	—	—	—	—	—	—	—	—	—
71 Bought	—	—	—	—	—	—	—	—	—	—	—	—
72 Bought	—	—	—	—	—	—	—	—	—	—	—	—
73 Bought	—	—	—	—	—	—	—	—	—	—	—	—
74 Bought	—	—	—	—	—	—	—	—	—	—	—	—
75 Bought	—	—	—	—	—	—	—	—	—	—	—	—
76 Bought	—	—	—	—	—	—	—	—	—	—	—	—
77 Bought	—	—	—	—	—	—	—	—	—	—	—	—
78 Bought	—	—	—	—	—	—	—	—	—	—	—	—
79 Bought	—	—	—	—	—	—	—	—	—	—	—	—
80 Bought	—	—	—	—	—	—	—	—	—	—	—	—
81 Bought	—	—	—	—	—	—	—	—	—	—	—	—
82 Bought	—	—	—	—	—	—	—	—	—	—	—	—
83 Bought	—	—	—	—	—	—	—	—	—	—	—	—
84 Bought	—	—	—	—	—	—	—	—	—	—	—	—
85 Bought	—	—	—	—	—	—	—	—	—	—	—	—
86 Bought	—	—	—	—	—	—	—	—	—	—	—	—
87 Bought	—	—	—	—	—	—	—	—	—	—	—	—
88 Bought	—	—	—	—	—	—	—	—	—	—	—	—
89 Bought	—	—	—	—	—	—	—	—	—	—	—	—
90 Bought	—	—	—	—	—	—	—	—	—	—	—	—
91 Bought	—	—	—	—	—	—	—	—	—	—	—	—
92 Bought	—	—	—	—	—	—	—	—	—	—	—	—
93 Bought	—	—	—	—	—	—	—	—	—	—	—	—
94 Bought	—	—	—	—	—	—	—	—	—	—	—	—
95 Bought	—	—	—	—	—	—	—	—	—	—	—	—
96 Bought	—	—	—	—	—	—	—	—	—	—	—	—
97 Bought	—	—	—	—	—	—	—	—	—	—	—	—
98 Bought	—	—	—	—	—	—	—	—	—	—	—	—
99 Bought	—	—	—	—	—	—	—	—	—	—	—	—
100 Bought	—	—	—	—	—	—	—	—	—	—	—	—
Total for Abattoirs	139,623,941	14,193,319	10.17	1.07	74,990,543	11,060,493	14.74	1.72	59,239,907	9,183,755	15.50	2.02
Total for Export Houses	124,558,813	13,999,231	11.24	—	50,890,436	8,380,460	16.46	—	53,427,502	9,302,971	17.52	—
Total for the 10 Companies	574,829	71,489	12.44	—	—	—	—	—	—	—	—	—
Total for all Cold Storage Warehouses in Canada	139,623,941	14,193,319	10.17	1.07	74,990,543	11,060,493	14.74	1.72	59,239,907	9,183,755	15.50	2.02
	124,558,813	13,999,231	11.24	—	50,890,436	8,380,460	16.46	—	53,427,502	9,302,971	17.52	—
	189,952,154	20,425,417	10.75	0.7	113,125,331	16,780,800	14.84	0.83	15,723,503	7,006,367	15.43	2.93
	170,472,105	19,522,000	11.45	—	69,629,561	10,900,161	15.67	—	54,050,692	9,927,020	18.36	—

TABLE II (continued).

COLD STORAGE

63

	Bacon				Ham				Mutton and Lamb			
	Lbs.	\$	Average cents	Margin cents	Lbs.	\$	Ave. cents	Margin cents	Lbs.	\$	Average cents	Margin cents
Company 1 Bought	95,950	23,888	24.89	1.26	94,550	21,968	23.33	0.90	2,944,992	513,895	18.46	1.0
2 Bought	100,940	26,012	26.15	—	96,638	23,477	24.29	—	2,647,721	510,769	19.46	—
3 Bought	—	—	—	—	—	—	—	—	806,281	127,543	11.71	0.60
4 Bought	—	—	—	—	—	—	—	—	904,228	118,444	15.39	—
5 Bought	—	—	—	—	—	—	—	—	167,243	29,135	17.21	1.35
6 Bought	414,056	73,695	17.79	3.4	1,207,104	206,071	10.26	2.3	4,585,980	699,791	15.29	1.03
7 Bought	402,447	85,287	21.19	—	1,079,583	200,329	18.50	—	4,022,994	665,404	16.29	—
8 Bought	—	—	—	—	—	—	—	—	344,781	52,384	15.29	1.62
9 Bought	19,235,557	7,128,476	14.47	3.56	2,845,017	383,816	13.48	6.01	424,877	71,861	16.91	—
10 Bought	42,408,183	7,605,571	18.03	1.6	7,657,458	534,062	20.09	—	183,492	29,975	16.33	less 0.38
11 Bought	1,554,020	302,607	19.47	—	—	—	—	—	176,083	28,094	15.95	—
12 Bought	1,387,023	292,239	—	—	—	—	—	—	—	—	—	—
13 Bought	—	—	—	—	—	—	—	—	—	—	—	—
14 Bought	65,397,154	10,681,590	16.35	5.05	1,319,966	196,718	14.90	4.91	2,887,607	468,727	16.23	0.33
15 Bought	97,791,019	20,929,442	21.40	—	938,807	185,994	19.81	—	2,443,729	404,899	16.56	—
16 Bought	—	—	—	—	—	—	—	—	—	—	—	—
17 Bought	—	—	—	—	—	—	—	—	—	—	—	—
18 Bought	5,554,128	1,005,523	18.10	1.37	1,515,791	322,994	21.30	2.03	—	—	—	—
19 Bought	5,428,620	1,057,206	19.47	4.67	1,606,435	374,860	23.33	—	—	—	—	—
20 Bought	116,406,737	18,201,256	15.65	—	5,526,737	908,573	16.43	3.55	11,982,385	1,951,150	16.29	0.77
21 Bought	142,150,607	28,899,041	20.32	—	4,772,776	953,862	19.98	—	10,787,141	1,839,515	17.06	—
22 Bought	5,554,128	1,005,523	18.10	1.37	1,515,791	322,994	21.31	2.02	—	—	—	—
23 Bought	5,428,620	1,057,206	19.47	—	1,606,435	374,860	23.33	—	—	—	—	—
24 Bought	121,962,865	19,215,779	15.75	4.54	7,042,498	1,231,567	17.61	3.21	11,982,385	1,951,150	16.29	0.77
25 Bought	147,579,227	29,950,247	20.29	—	6,379,211	1,328,722	20.82	—	10,787,141	1,839,515	17.06	—
26 Bought	125,605,312	19,795,040	15.76	4.58	14,383,485	2,761,676	19.20	2.12	13,609,605	2,286,930	16.8	0.61
27 Bought	151,399,429	30,787,823	20.34	—	14,390,307	3,067,809	21.32	—	12,666,380	2,205,229	17.41	—
28 Bought	—	—	—	—	—	—	—	—	—	—	—	—
29 Bought	—	—	—	—	—	—	—	—	—	—	—	—
30 Bought	—	—	—	—	—	—	—	—	—	—	—	—
31 Bought	—	—	—	—	—	—	—	—	—	—	—	—
32 Bought	—	—	—	—	—	—	—	—	—	—	—	—
33 Bought	—	—	—	—	—	—	—	—	—	—	—	—
34 Bought	—	—	—	—	—	—	—	—	—	—	—	—
35 Bought	—	—	—	—	—	—	—	—	—	—	—	—
36 Bought	—	—	—	—	—	—	—	—	—	—	—	—
37 Bought	—	—	—	—	—	—	—	—	—	—	—	—
38 Bought	—	—	—	—	—	—	—	—	—	—	—	—
39 Bought	—	—	—	—	—	—	—	—	—	—	—	—
40 Bought	—	—	—	—	—	—	—	—	—	—	—	—
41 Bought	—	—	—	—	—	—	—	—	—	—	—	—
42 Bought	—	—	—	—	—	—	—	—	—	—	—	—
43 Bought	—	—	—	—	—	—	—	—	—	—	—	—
44 Bought	—	—	—	—	—	—	—	—	—	—	—	—
45 Bought	—	—	—	—	—	—	—	—	—	—	—	—
46 Bought	—	—	—	—	—	—	—	—	—	—	—	—
47 Bought	—	—	—	—	—	—	—	—	—	—	—	—
48 Bought	—	—	—	—	—	—	—	—	—	—	—	—
49 Bought	—	—	—	—	—	—	—	—	—	—	—	—
50 Bought	—	—	—	—	—	—	—	—	—	—	—	—
51 Bought	—	—	—	—	—	—	—	—	—	—	—	—
52 Bought	—	—	—	—	—	—	—	—	—	—	—	—
53 Bought	—	—	—	—	—	—	—	—	—	—	—	—
54 Bought	—	—	—	—	—	—	—	—	—	—	—	—
55 Bought	—	—	—	—	—	—	—	—	—	—	—	—
56 Bought	—	—	—	—	—	—	—	—	—	—	—	—
57 Bought	—	—	—	—	—	—	—	—	—	—	—	—
58 Bought	—	—	—	—	—	—	—	—	—	—	—	—
59 Bought	—	—	—	—	—	—	—	—	—	—	—	—
60 Bought	—	—	—	—	—	—	—	—	—	—	—	—
61 Bought	—	—	—	—	—	—	—	—	—	—	—	—
62 Bought	—	—	—	—	—	—	—	—	—	—	—	—
63 Bought	—	—	—	—	—	—	—	—	—	—	—	—
64 Bought	—	—	—	—	—	—	—	—	—	—	—	—
65 Bought	—	—	—	—	—	—	—	—	—	—	—	—
66 Bought	—	—	—	—	—	—	—	—	—	—	—	—
67 Bought	—	—	—	—	—	—	—	—	—	—	—	—
68 Bought	—	—	—	—	—	—	—	—	—	—	—	—
69 Bought	—	—	—	—	—	—	—	—	—	—	—	—
70 Bought	—	—	—	—	—	—	—	—	—	—	—	—
71 Bought	—	—	—	—	—	—	—	—	—	—	—	—
72 Bought	—	—	—	—	—	—	—	—	—	—	—	—
73 Bought	—	—	—	—	—	—	—	—	—	—	—	—
74 Bought	—	—	—	—	—	—	—	—	—	—	—	—
75 Bought	—	—	—	—	—	—	—	—	—	—	—	—
76 Bought	—	—	—	—	—	—	—	—	—	—	—	—
77 Bought	—	—	—	—	—	—	—	—	—	—	—	—
78 Bought	—	—	—	—	—	—	—	—	—	—	—	—
79 Bought	—	—	—	—	—	—	—	—	—	—	—	—
80 Bought	—	—	—	—	—	—	—	—	—	—	—	—
81 Bought	—	—	—	—	—	—	—	—	—	—	—	—
82 Bought	—	—	—	—	—	—	—	—	—	—	—	—
83 Bought	—	—	—	—	—	—	—	—	—	—	—	—
84 Bought	—	—	—	—	—	—	—	—	—	—	—	—
85 Bought	—	—	—	—	—	—	—	—	—	—	—	—
86 Bought	—	—	—	—	—	—	—	—	—	—	—	—
87 Bought	—	—	—	—	—	—	—	—	—	—	—	—
88 Bought	—	—	—	—	—	—	—	—	—	—	—	—
89 Bought	—	—	—	—	—	—	—	—	—	—	—	—
90 Bought	—	—	—	—	—	—	—	—	—	—	—	—
91 Bought	—	—	—	—	—	—	—	—	—	—	—	—
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95 Bought	—	—	—	—	—	—	—	—	—	—	—	—
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98 Bought	—	—	—	—	—	—	—	—	—	—	—	—
99 Bought	—	—	—	—	—	—	—	—	—	—	—	—
100 Bought	—	—	—	—	—	—	—	—	—	—	—	—
101 Bought	—	—	—	—	—	—	—	—	—	—	—	—
102 Bought	—	—	—	—	—	—	—	—	—	—	—	—
103 Bought	—	—	—	—	—	—	—	—	—	—	—	—
104 Bought	—	—	—	—	—	—	—	—	—	—	—	—
105 Bought	—	—	—	—	—	—	—	—	—	—	—	—
106 Bought	—	—	—	—	—	—	—	—	—	—	—	—
107 Bought	—	—	—	—	—	—	—	—	—	—	—	—
108 Bought	—	—	—	—	—	—	—	—	—	—	—	—
109 Bought	—	—	—	—	—	—	—	—	—	—	—	—
110 Bought	—	—	—	—	—	—	—	—	—	—	—	—
111 Bought	—	—	—	—	—	—	—	—	—	—	—	—
112 Bought	—	—	—	—	—	—	—	—	—	—	—	—
113 Bought	—	—	—	—	—	—	—	—	—	—	—	—
114 Bought	—	—	—	—	—	—	—	—	—	—	—	—
115 Bought	—	—	—	—	—	—	—	—	—	—	—	—
116 Bought	—	—	—	—	—	—	—	—	—	—	—	—
117 Bought	—	—	—	—	—	—	—	—	—	—	—	—
118 Bought	—	—	—	—	—	—	—	—	—	—	—	—
119 Bought	—	—	—	—	—	—	—	—	—	—	—	—
120 Bought	—	—	—	—	—	—	—	—	—	—	—	—
121 Bought	—	—	—	—	—	—	—	—	—	—	—	—
122 Bought	—	—	—	—	—	—	—	—	—	—	—	—
123 Bought	—	—	—	—	—	—	—	—	—	—	—	—
124 Bought	—	—	—	—	—	—	—	—	—	—	—	—
125 Bought	—	—	—	—	—	—	—	—	—	—	—	—
126 Bought	—	—	—	—	—	—	—	—	—	—	—	—
127 Bought	—	—	—									

nies in Canada. In the same year Canada's total export of bacon was, according to the figures of the Trade and Commerce Department, 169 million pounds. Perhaps no country supplying the Allies with food can afford an example of a nearer approach to a monopoly in one commodity. The basis of a monopoly in bacon existed before the war, and the extraordinary conditions ruling since the outbreak of hostilities have enabled its development.

The general expansion of trade due to the war did not bring equal profits to the ten large companies mentioned in Table II. Table III shows approximately the increase in their receipts, from trade in the products covered by the investigation, between 1913 and 1916. By-products, such as hides and lard, are excluded. The disproportionate increase of the profits of Companies Nos. 5 and 10 is largely due to their sales of pork and bacon. Company No. 1, one of the largest dealers in beef in the West, has trebled its sales of beef since 1913.

TABLE III.

Company	1913	1914	1915	1916
No. 1	3,300,000	4,600,000	7,200,000	8,800,000
" 2	4,600,000	4,600,000	7,000,000	9,000,300
" 3	570,000	550,000	600,000	980,000
" 4	12,630,000	14,000,000	14,000,000	16,215,000
" 5	2,500,000	3,500,000	7,000,000	11,900,000
" 8	2,700,000	2,700,000	3,600,000	3,600,000
" 9	4,300,000	8,000,000	18,500,000	28,100,000
" 10	5,300,000	5,600,000	6,700,000	8,100,000
" 11	900,000	1,100,000	1,300,000	2,500,000
" 12	9	—	—	(1) 6,400,064

(1) The records of Company No. 13 for 1913 are not available. The figures representing this company's receipts in 1913 are added because there is at least a partial overlapping of its directorate with that of Company No. 9 and perhaps a closer association of the two companies.

§ 4. GENERAL CONCLUSIONS.

The following are the general conclusions of the investigators under the order-in-council.

The business of the cold storage companies has on the whole been fairly conducted. There has been no illegal combination and no excessive accumulation on the part of any of them.

Individual instances of profiteering occurred during 1916. The profiteering companies as a rule lowered their margins in 1917, after the order-in-council as to the cost of living had come into force, but these margins seem to have remained too high. The question of their justice or injustice cannot however be absolutely determined without either a criminal prosecution or a declaration by the Food Controller as to fair prices or a fair margin.

A tendency has become apparent on the part of a few companies to exact seemingly excessive margins on beef and butter. As to this matter also there cannot be certainty without a prosecution or a declaration of the Food Controller.

The profits of most of the cold storage companies not convicted of profiteering might probably be lessened as regards certain of their lines of trade, although the prices they obtain are not high as compared with those prevalent before the war. The great extension of their business during the war would probably make lessened profits on individual transactions fair.

Any lowering of the margins of the cold storage companies will only go a short way towards reducing prices to the consumer. The profits of the companies were made on their enormous turnovers, their margin per pound or per dozen being comparatively small.

Finally the report of the investigation states that the farmer, the cold storage warehouse, the wholesale produce merchant, the retailer and the consumer, indeed all persons who in any way have come into relation with the commodities covered by this report — including, among a multitude of others, the farm labourers whose wages have been increased, the carter whose charge has risen, the miller whose shorts and bran command higher prices, the employees of wholesalers and retailers whose pay is higher, the consumer who requires delivery on a more expensive system, and who besides is, on his own account as master or employee, a link in a chain causing other high prices which react upon the prices of the commodities covered by this report — all have contributed to produce existing prices. There cannot be peace prices in war conditions.

UNITED STATES.

THE IMPROVEMENT OF CONDITIONS AMONG IMMIGRANTS INTO CALIFORNIA.

OFFICIAL SOURCES:

SECOND ANNUAL REPORT OF THE COMMISSION OF IMMIGRATION AND HOUSING OF CALIFORNIA
2 January 1916. San Francisco, 1916.

IMMIGRANT EDUCATION LEAFLETS. Published by the Commission of Immigration and Housing
of California.

THE HOME TEACHER. THE ACT WITH A WORKING PLAN. Published by the Commission of Im-
migration and Housing of California, San Francisco, 1916.

ADVISORY PAMPHLET ON CAMP SANITATION AND HOUSING. San Francisco, 1916.

REPORT ON UNEMPLOYMENT TO HIS EXCELLENCY GOVERNOR HIRAM W. JOHNSON, BY THE
COMMISSION OF IMMIGRATION AND HOUSING OF CALIFORNIA. 9 December 1914.

REPORT ON RELIEF OF DESTITUTE UNEMPLOYED 1914-1915 TO HIS EXCELLENCY GOVERNOR
HIRAM W. JOHNSON BY THE COMMISSION OF IMMIGRATION AND HOUSING OF CALIFORNIA.
25 JUNE 1915.

On 12 June 1913 the parliament of California approved an Act creat-
ing the Commission of Immigration and Housing.

This commission consists of five persons nominated by the governor
of the State and receiving no payment other than reimbursement of the
necessary expenses they incur while travelling on the commission's business.
The commission has power fully to investigate the condition of immigrants
and the opportunities before them. It gathers information as to agricultural
possibilities and opportunities for settlement on land within the State, and
may therefore make surveys of soil and arable land and collect data as to
price and productivity, and also as to the need and demand of agriculture
for labour. It must co-operate with State and municipal employment bureaux
and private employment agencies, and also with similar federal insti-
tutions and institutions in other States, in order to secure the distribution
and employment of immigrants. It must collect and publish, for distri-
bution among immigrants, such information in English and foreign languages
as is deemed essential to their protection, distribution, education and
welfare. It must co-operate with the proper authorities and organiza-
tions, both public and private, in order to give the immigrant the best
opportunities for acquiring education and citizenship. It may inspect all
labour camps within the State and investigate the housing conditions in
which immigrants live. It is responsible for calling the attention of the
proper authorities to violations, to the detriment of immigrants, of the

laws pertaining to the payment of wages, to employment generally and to housing conditions.

With the aid of the commission's official publications we will shortly examine its efforts in the principal spheres entrusted to it and the results it has hitherto obtained, with particular reference to agricultural labourers.

§ I. IMMIGRATION AND SETTLEMENT.

The commission, while realizing the advisability of directing the tide of immigration towards agriculture in order to hasten development of the land and to lessen the supply of unskilled labour which tends to lower the wages of the working classes, has throughout been aware of the danger, no less great, of recruiting for agriculture among untrained and unfit immigrants without necessary capital. In a recent article (1) we spoke of interior colonization in California and showed the conditions of agriculture in this State and the needs formulated by the commission which investigated them. The new system of land credit, instituted by the law of 17 July 1916, will not fail sooner or later to facilitate the settlement of a part of the floating rural population in that it will give it means of access to the land.

The commission has confined its attention to the improvement of rural conditions and to furnishing general information to all those who are attracted to this country. Indirectly much of its work has tended to make rural life more attractive, especially its effort to secure better housing and sanitation in small towns, on farms and in labour camps, and its educational programme to which we will presently recur. It has taken direct action in two ways, by prosecuting cases of fraudulent sales of land and securing the passage of the Act which forbids dishonest advertising of land, and by arranging to supply information as to agricultural land to prospective purchasers. By the Act in question, which was approved in 1915, a new section was added to the State Penal Code making it a misdemeanour to publish or disseminate any untrue or misleading statement concerning the situation, extent, or any other quality or attribute of real estate situated in this State or elsewhere.

In all, since the Complaint Bureau was founded by the Commission, it has dealt with 7,369 cases; and of the 2,906 complaints received in 1915, 94 were of frauds connect with sales of land.

As regards its supply of information the Commission has made an arrangement with the Division of Agricultural Extension of the University of California, in virtue of which the land experts of the latter department not only furnish general information but also make special reports on particular tracts of land. The following notice, in several languages, is placarded throughout the State. "The Commission... will make an investigation and

(1) *International Review of Agricultural Economics*, September 1917, page 59.

free report to any immigrant concerning any particular tract of land which he may have visited and the purchase of which he is contemplating. This report will include a careful study of the land involved, both from the point of view of its agricultural possibilities and from the point of view of its location as regards marketing possibilities. If an immigrant also states his previous experience, his financial condition, and answers freely other questions put to him, this report will also give specific advice as to the wisdom of taking up the proposed land. Before any immigrant buys or makes any payment on a piece of land he should have a free report on it from the State Commission of Immigration and Housing, 525 Market Street, San Francisco. The Commission's interpreters speak and write all languages."

It is hoped in this way to reach the majority of prospective immigrant purchasers and thus prevent frauds in the sale of lands rather than prosecute for frauds which have already been perpetrated. Hundreds of complaints which reach the Complaint Bureau show that most purchasers of land are sadly in need of expert advice. Even many trained farmers seem unable to judge of soil and of the general agricultural value of land except by actual experience, and certainly immigrants unfamiliar with Californian conditions need advice and assistance. It is felt therefore that this scheme has great possibilities, and the commission hopes next year to report considerable progress in connection with it.

§ 2. LABOUR AND UNEMPLOYMENT.

Section 5 of the Act creating the Commission empowered it "to devise and carry out such suitable methods as will tend to prevent or relieve congestion and obviate unemployment".

The task implied is considerable. The distribution of labour and its utilization in accordance with the workmen's aptitudes and individual qualities is one of the problems most difficult to solve.

The Commission has studied it in relation to the special conditions which prevail in California. In co-operation with the United States Commission on Industrial Relations it has conducted an enquiry within this State under the following headings:

"a) Study of special localities to show methods of obtaining labour;

"b) Study of several hundred life histories of migratory and casual workers [to learn causes of unemployment and methods of obtaining jobs;

"c) Study of available material in United States census, report of United States Immigration Commission, report of State Commissioner of Labour Statistics, reports of labour unions in California;

"d) Investigation of eighty-one private employment agencies within the State to determine their real status and value".

In December 1914 the Commission presented to the government a re-

port which contained the following among other detailed recommendations :

1) The creation of a State bureau of labour exchanges under a representative board or commission and having branch offices in the centres of population to act as a clearing-house for labour. The bureau should co-operate with the Railway Commission to provide low fares for the labourers it places, and should have authority to regulate private and philanthropic agencies of employment, issuing and revoking licenses to them at pleasure.

2) The enactment of more stringent laws for the regulation of private employment agencies.

3) The appointment of a special committee or some existing commission to conduct an extended investigation into the wisdom of devising a scheme for insurance against unemployment, possible schemes for regularizing and dovetailing private enterprise, and ways and means of undertaking public works during periods of depression.

4) The organization of rural credit on European lines.

5) A State land bureau which would preferably co-operate with the University of California.

Some of these recommendations have already been followed, notably numbers 2, 3 and 4 ; and as regards number 4, which was also a recommendation of the Commission on Land Colonization whose report we treated in our article already cited, the Commission of Immigration has, as we have seen, succeeded in forming within itself a special organization which constitutes a great improvement on the previous state of affairs.

As regards the problems of agricultural labour they are no more than an aspect of the general agrarian problem in California. Speculation in land has had deplorable consequences. On this subject Colonel Harris Weinstock expressed himself as follows, in an address delivered on 11 November 1914 to the California State Fruit Growers' Convention : " Great fortunes have been expended throughout the nation and elsewhere, inviting people to engage in California horticulture and agriculture, but our methods have been so crude and so unscientific and the love of greed on the part of land promoters has been such that a very great proportion of those who have been induced to come here and to buy our acreage have failed, with great misfortune to themselves and with serious injury to the State. A frightfully large proportion of such investors have come to grief, have been forced back to the cities, many of them as unskilled labourers, to swell the ranks of the casual unemployed...." The Commission would look with favour on legislation which would break up large holdings of unimproved lands and open them up to development and colonization.

In the matter of unemployment the Commission, at the governor's request, laid down for the towns and counties of the State a uniform plan of action, according to which the unemployed executed works of public utility in return for board and lodging. It was an interesting attempt to replace unproductive charity by useful work. In the winter of 1914-1915 more than 100,000 persons profited directly or indirectly by this organization.

§ 3. EDUCATION.

In order to raise the intellectual and moral level of immigrants the Commission has engaged, in accordance with the Act, in a campaign against ignorance. A considerable proportion of the foreign labourers are illiterate. The first efforts were naturally made in the towns where evening schools and classes in civics teach the English language and the rules of political and social life to an increasing number of aliens. An Act approved in April 1915, which had effect from the following 10th of August — the Home Teacher Act — brought education to the women and girls who had previously been neglected. By its terms "home teachers" are appointed "to work in the homes of pupils (of the common schools) instructing children and adults in matters relating to school attendance and preparation therefor; also in sanitation, in the English language, in household duties such as purchase, preparation and use of food and of clothing, and in the fundamental principles of the American system of government and the rights and duties of citizenship".

The educational programme we have outlined is however designed to benefit only the immigrants who live in towns or within reach of rural schools. The thousands who live in labour camps and other isolated places have to be reached in other ways. In the 663 labour camps inspected by the Commission between July 1915 and January 1916 there were 17,140 foreign-born persons of whom only 1,786 or 10.4 per cent. were naturalized citizens. Of their number 4,371 spoke no English. Instruction was offered in only $\frac{7}{10}$ per cent. of the camps and only 36 per cent. of them were within a mile of a public school. Attendance at a night school more than a mile away can hardly be expected of tired working men. The data collected in labour camps in the past two years show that, at a conservative estimate, some 75,000 people live in them either all the year round or for a considerable part of each year.

The Commission found that it was absolutely necessary to provide schooling for some 5,000 children in the labour camps. A system of correspondence courses for adults has been mapped out, with a view to allowing migratory workers to pursue their courses as they pass from camp to camp; and it has been planned that an instructor shall visit the larger camps at regular intervals in order to give personal teaching and keep alive the interest in self-education.

§ 4. STATISTICS AS TO LABOUR CAMPS AND THEIR SANITARY CONDITION.

The labour camps of California are for agricultural labourers and lumbermen and for industrial workers. To the former of these two categories belong persons employed on 1) beetroot cultivation, 2) fruit growing, 3) in vineyards, 4) in hop-yards, 5) in woods, and 6) on ranches. As regards the numbers of residents of camps thus severally employed the Commis-

sion found that in the 663 camps it inspected between 1 July 1915 and 1 January 1916 there were working on	
beetroot fields	1,758 persons (men, women and children)
fruit farms	1,151
vineyards	69
hop plantations	6,857
lumber	10,221
ranches	775

or a total of 20,831 agricultural labourers and lumbermen as against a total of 19,610 inhabitants of the various industrial camps. In the absence of precise data as to all the camps, of which there are more than a thousand, it may be concluded that their population is fairly evenly divided between the agricultural and the industrial classes. About 21 per cent. of the total population of the inspected camps is made up of 4,596 women and 4,064 children, a circumstance which makes more urgent the hygienic measures prescribed by the Commission. Women were found in 380 camps, as earners in 196. Of the women at work 1,769 were employed on hop picking and jam making, the others in the beetroot fields, as cooks or on other domestic work. Of the total employed population 9,405 persons were skilled and 24,258 unskilled labourers. On this point data for 36 camps are lacking. More than 70 per cent. of the skilled labourers were employed in mines and quarries, on oilfields and on lumber works. In agricultural camps the percentage of skilled labour was very small. It was 8.4 per cent. in the beetroot fields, 13.5 per cent. in the fruit plantations, 0.2 per cent. in the hopyards, and 10.7 per cent. on the ranches. Among the lumbermen it was as much as 43.4 per cent. Of 36,264 adult labourers 6,948 or about 19 per cent., including 3,376 skilled labourers, were married. In other words 35.8 per cent. of the skilled labourers were married while only 14.7 per cent. of the others had charge of a family. It is further interesting to note that the comparatively permanent work of the oilfields employed men of whom 40.5 per cent. were married, while in the other camps less than 10 per cent. of the residents were married.

In 1913 an Act was passed for the improvement of the sanitary condition of labour camps. Its enforcement was entrusted to the State Board of Health, which delegated such task to the Commission of Immigration. On 8 August 1915 the amended Labour Camp Sanitation Act became effective and the State Board's power of enforcement was transferred to the Commission. In applying the law the Commission took into account the fact that the data it had collected up to 1 January 1915 showed more than half the residents of Labour Camps to be immigrants.

The inspection of the labour camps had shown that the condition of many of them was insanitary. The Commission endeavours to bring about improvement through friendly co-operation between employers and employed. So far it has not been necessary to resort to the courts to secure com-

pliance with the laws, and threats of a prosecution, to be made failing the execution of improvements within a fixed time, have been few but effective. An educational pamphlet on camp sanitation and on housing has been published and placards, on the same subject have been placed in the camps. The amendments of the Labour Camp Sanitation Act passed by the legislature of 1915 practically brought the legal standard of living condition up to the level of that advised in the pamphlet. They were as follows :

" 1) Mess houses, kitchens and dining tents must be kept in a sanitary state and all openings must be screened (against flies) ;

" 2) Adequate and convenient toilet facilities must be provided — latrines or privies must have pits of certain depth, lime or ashes must be used as disinfectants, and all openings must be screened ;

" 3) Garbage and rubbish must be deposited in sanitary, covered receptacles which must be emptied daily, and the contents disposed of by a sanitary method ;

" 4) The Commission of Immigration and Housing of California shall enforce the Act, and have the power to inspect all camps to secure compliance with the above new provisions, and also with the sections of the Act dealing with adequate sleeping facilities, general sanitation, cleanliness, etc. "

The Commission has supplied detailed plans of bath-houses for men and women in the camps and of refuse incinerators, and instructions for sinking and managing wells, for making portable latrines and for making clean, airy and fly-proof kitchens and mess-houses. It has laid down the precautions to be taken against mosquitoes where there is stagnant water, the necessity of depositing refuse at a distance from kitchens, and the precautions to be taken against the contamination of drinking water, etc. It has been supported by the Bureau of Sanitary Engineering which was created in 1915 and which deals with all the technical problems of sanitation which formerly fell to the Commission's engineer.

It is estimated that 46 per cent. of the camps inspected in 1915 might be classed as " good ", 35 per cent. as " fair ", and 19 per cent. as " bad ". This shows an increase of 12.1 on the percentage of " good " camps in 1914 and a decrease of 11 per cent. on that of " bad " camps. Moreover 51.3 per cent. of the labourers were lodged in " good " camps in 1915 as compared with 35.5 per cent. in 1914. It is evident therefore that there is on the whole a response in the larger camps to the Commission's efforts.

Facilities for bathing existed in only 420 of the 663 camps inspected. It was found that in only two of these 420 camps did the men use the baths less often than once a week : in 208 they used them daily and in 123 weekly.

No latrines were provided in 52 camps, but this indicates an improvement on 1914 when there were none in 114 out of 876 camps.

Precautions against flies in mess-houses and kitchens are harder to teach but there has been a noticeable improvement in this direction.

As regards sleeping accommodation 22 per cent. of the camps entirely failed to satisfy the requirements of the Commission in this respect. In 34 per cent. of them there were no floors in the bunk-houses or sleeping

tents. In ten camps there were no bunks and the men had to sleep on the ground.

As regards the nationality of the labourers 7.06 per cent. of the immigrants in the 663 camps inspected were Mexicans, 11.40 were Italians, 4.76 were Japanese, 3.16 were Spaniards, 2.65 were Portuguese and 2.34 were Greeks.

The work accomplished by the Commission of Immigration and Housing was summarized by Governor Hiram W. Johnson in his message to the Californian legislature in 1915. "The labour camps of the State of California were in many cases unfit for human habitation. The Commission of Immigration and Housing undertook a systematic inspection of these camps. Hundreds of them it has cleaned up and rendered sanitary. For more than 60,000 human beings the Commission has provided better and more sanitary places in which to live, and for this great work, so well performed, the Commission has the thanks not only of those who were unable to aid themselves and have benefited, but of the State at large".

GREAT BRITAIN AND IRELAND.

FURTHER PROVISIONS OF THE CORN PRODUCTION ACT 1917.

OFFICIAL SOURCE :

JOURNAL OF THE DEPARTMENT OF AGRICULTURE AND TECHNICAL INSTRUCTION FOR IRELAND,
Vol. XVII, No. 1, Dublin, April 1917.

In our issue for last October we explained the Corn Production Act 1917 as it affects the wages of agricultural labourers and restricts the raising of agricultural rents in England and Wales. We purpose now to state what are the further provisions of this law.

§ 1. MINIMUM PRICE OF WHEAT AND OATS.

A farmer who is compelled to pay a minimum wage to the labourers he employs may find that he is in consequence tilling his land at a loss if the sum of the wages and the rent he pays be disproportionate to the price at which he sells his crops. In such case he has a legitimate grievance ; and therefore the Act not only, as we explained in our previous article, protects him against an unfair increase of his rent, but also guarantees to him a minimum price for his wheat and oats.

The *guarantee* is afforded by the first clause of Part I of the Act which states that " if the average price for the wheat or oats of any year for which a minimum price is fixed under this Act... is less than the minimum price as fixed by this Act, the occupier of any land on which wheat or oats have been produced for that year shall be entitled to be paid by the Board of Agriculture and Fisheries in respect of each quarter of wheat or oats which he proves to the satisfaction of the board to have been so produced and to have been sold, a sum equal to the difference between the average price and the minimum price per quarter ".

The minimum prices are fixed as follows :

Crop for Year	Wheat, price per quarter	Oats, price per quarter
1917	60s.	38s. 6d.
1918	55s.	32s.
1919		
1920		
1921		
1922		
	45s.	24s.

The *average price* for the wheat or oats of any year is defined as the average price for the seven months beginning on the first day of September, and is to be calculated from all the weekly averages for those months. Such weekly average prices of wheat and oats are to be ascertained in accordance with the Corn Returns Act, 1882. The Board of Agriculture and Fisheries will, as soon as possible after the end of March in any year, cause the average price of wheat and oats for the preceding year to be published in the "London Gazette".

The *occupier* of any land is defined for the purposes of the Act as the person who occupies on the first day of September in any year the land on which the grain in question is in that year produced.

No *payments* under this part of the Act in respect of any wheat or oats sold will be made unless the Board of Agriculture be convinced that the grain has been delivered in pursuance of the sale. All claims for such payments must be made to the board which will solely and finally determine with respect to them. Any person making a false statement or representation in order to obtain such a payment is liable on summary conviction to imprisonment with or without hard labour for a term not exceeding six months.

§ 2. POWER TO ENFORCE PROPER CULTIVATION.

The provisions in the first three parts of the Act as to minimum wages, rents and minimum prices seek to ensure that farming is profitable to the farmer. The fourth part of the Act is directed against the farmer to whose activity the guarantee of a fair profit is not a sufficient stimulus.

The Board of Agriculture and Fisheries may, if they consider that any land is not being cultivated to the best interests of the country, serve a notice on the occupier requiring him to cultivate it in accordance with their directions. If he fail to do this, the board may, if he be owner of the land, enter on it and take any steps they think necessary for its adaptation or cultivation, all for such time as they think fit. If the recalcitrant occupier be a tenant the board may make such order as they deem to be necessary, either authorizing the landlord to determine the tenancy as they require, or themselves determining the tenancy, or directing that the tenancy be continued but that any covenant or condition of the contract thereof which seems to them to interfere with the required cultivation of the land be suspended. Any such order of the board will have effect as though it were contained in the contract of tenancy. It may include provisions adjusting the relations between tenant and landlord where tenancy is determined, or securing payments or other benefits to the landlord where tenancy is suspended.

No penalty in the shape of an increase of rent or otherwise will be incurred by a tenant, whatever be his contract of tenancy, for any action which the board certify that he has taken reasonably in order to carry out their directions.

On withdrawing from possession of land on which they have entered

under this section of the Act the board may recover from the person then entitled to resume its occupation the value of the works of cultivation and adaptation which they have executed ; and such person will be entitled to receive from them compensation for any direct or substantial loss which he has incurred in consequence of their action. The amount payable in either case will, in default of agreement between those concerned, be determined by a single arbitrator in accordance with the Agricultural Holdings Act, 1908. If the disputing parties do not agree upon an arbitrator he will be nominated by the President of the Surveyors' Institution.

The Board of Agriculture and Fisheries may authorize any person or body of persons to exercise on their behalf any of their powers to enforce proper cultivation of land, or they may constitute a body to do so in conditions which they will prescribe.

§ 3. SPECIAL PROVISIONS FOR SCOTLAND AND IRELAND.

The Corn Production Act, 1917, is applicable to *Scotland* with the following modifications :

a) The Board of Agriculture for Scotland is substituted for the Board of Agriculture and Fisheries.

b) A separate Agricultural Wages Board is established for Scotland and substituted for the Agricultural Wages Board.

c) The Agricultural Holdings (Scotland) Act, 1908, is substituted for the Agricultural Holdings Act, 1908.

d) The Chairman of the Scottish Committee of the Surveyors' Institution is substituted for the President of the Surveyors' Institution.

e) The " Edinburgh Gazette " is substituted for the " London Gazette ".

To *Ireland* the Act is applied with the following modifications :

a) The powers and duties of the Board of Agriculture and Fisheries will be exercised and performed by the Lord Lieutenant or by or through such departments and bodies as he may determine.

b) A separate Agricultural Wages Board is established for Ireland and substituted for the Agricultural Wages Board ; but the powers of the latter board to fix minimum rates of wages shall be exercised by the Lord Lieutenant on the advice of the separate board for Ireland. For all references in the Act to the rate of at least 25s. a week references to an adequate rate are substituted. The provisions of the Act as to the retrospective effect of a minimum rate of wages for able-bodied men do not apply to Ireland.

c) The provisions of the Act as to the constitution of the Agricultural Wages Board and District Wages Committees do not apply to Ireland. This exception is due to the fact that the Irish members of the Agricultural Sub-Committee, on whose report the Act was based, were appointed at a later date than the English and Scottish members, and therefore it was impossible for the committee to give adequate attention to the special circumstances of Ireland which bear on the question of Wages Boards.

d) The provisions of the Act which restrict the raising of agricultural rents do not apply to Ireland, where agrarian conditions are so diverse from those in Great Britain that they would not be appropriate.

e) The amounts payable by or to an occupier who has been superseded, under this Act, for failure to cultivate his land as directed, will be determined in Ireland, in default of agreement, in accordance with the provisions of the Landlord and Tenant Act, 1870. The Lord Lieutenant in Council may further modify the provisions of the Act as to the enforcement of proper cultivation for the purpose of adapting them to schemes of tillage or systems of tenure in force in Ireland.

f) The "Dublin Gazette" is substituted for the "London Gazette"

§ 4. GENERAL CONSIDERATIONS UNDERLYING THE ACT.

In the foregoing paragraphs and in the article in our October number we have outlined all the main provisions of the Corn Production Act, 1917. They are an attempt to deal with a problem which has arisen in the course of two hundred years: in the beginning of the eighteenth century the United Kingdom produced enough wheat to make bread for its own population; in the beginning of the twentieth century it imported four fifths of the wheat it consumed. This dependence on imports has increased the cost of the war, aggravated the difficult problem of regulating foreign exchange, and absorbed an undue portion of the tonnage of the merchant navy when this has been sorely needed for other purposes. These facts led to the appointment in 1916 of a Sub-Committee of the Reconstruction Committee to consider the need of increasing home-grown supplies of food in the interest of national security and to report upon the methods of effecting such increase. The committee's report resulted in the Act we have examined.

The committee gave it as their opinion that the adoption of such an agricultural policy as the Act implies will lead to the production within the United Kingdom of much of the food that is now imported. They did not indeed claim that it is possible to grow at home enough food for the whole British population — for that there are in our islands too many mouths and too few acres; but they considered that food production can be enormously increased by better tillage and more farming. They believed moreover that the production of cereals can be largely increased not only without diminishing but even while increasing the production of meat and milk.

The Act is explicitly temporary: it is to continue in force only until 1922 unless Parliament make provision for its prolongation. The committee recommended that prices comparable with those which ruled during the war should be guaranteed for two years after peace had been declared. They did this especially in view of the necessity of inducing farmers to break up grass land and bring it under the plough. Only the sure prospect of a profit which would continue would reconcile many of them to expending money and labour on this undertaking.

The Act meets the recommendation of the committee by its provision of a six years' guarantee.

The Committee looked beyond the war. They stated that after peace has been declared the financial and physical welfare of the country will demand the fullest possible development of the capacity of the soil. Burdened with a huge debt the nation will be strongly interested in producing as much as possible of its food and importing as little as possible. Exhausted in man-power it will find in the expansion of the rural population of its islands the best restorative of its vital and creative energy.

Two recommendations of the committee have not been reflected in the Act. In the first place they gave it as their opinion that there can be no satisfactory development of agriculture while the demand for good cottages for agricultural labourers remains unsatisfied. The provision of cottages should be undertaken without a moment's avoidable delay after the war.

Secondly the committee recognized that the State ought to place at the disposal of farmers the best available scientific and practical advice. They declared indeed that it was essential to their scheme that the present opportunities for agricultural education, technical advice and research should be developed. There must be insistence on the importance of drainage, demonstrations of the best means of converting grass to arable land and of manuring, demonstrations as to the best varieties of seed, and in general as to methods of increasing production without loss of profit.

MISCELLANEOUS INFORMATION RELATING TO AGRICULTURAL ECONOMY IN GENERAL

GREAT BRITAIN AND IRELAND.

WAGES BOARDS IN ENGLAND AND WALES. *The Journal of Agriculture*, Vol. XXIV,
No. 7, London, October 1917.

In pursuance of the Corn Production Act 1917 (1) the Board of Agriculture and Fisheries issued on the 28th of last September provisional regulations, to have immediate force, with respect to the constitution and proceedings of the Agricultural Wages Board for England and Wales, shortly to be appointed.

In addition to the Central Wages Board, District Wages Committees will be set up throughout England and Wales, each comprising an equal number of representatives of employers and workers, respectively, and also one or more impartial persons appointed by the Board of Agriculture and Fisheries. These Committees will have to make recommendations to the Central Board as to the rates of wages applicable to their districts.

As will be observed from the provisional regulations the representative members on the Central Board will be partly elected by organizations representing farmers and labourers, respectively, and partly nominated by the Board of Agriculture and Fisheries.

The President will be glad to receive and consider suggested names of representatives of employers, submitted by farmers' organizations, or by groups of at least ten farmers, and of representatives of workers, submitted by labourers' organizations, or by groups of at least ten agricultural labourers. From among the persons so suggested nominated representative members of the Central Board and of the District Committees will be selected. Members of the Central Board and of District Committees will be entitled to an allowance in respect of out-of-pocket expenses.

The Provisional Regulations are as follows :

" 1. An Agricultural Wages Board shall be established for England and Wales consisting of 39 persons, of whom seven shall be appointed members and the remainder representative members. The representative members shall be members representing employers and workmen, respectively, in equal proportions.

" 2. The Chairman and Deputy Chairman shall be appointed by the Board of Agriculture and Fisheries from among the members of the Wages Board, and each of them shall (provided that he continues to be a member of the Wages Board) hold office for such period as the Board of Agriculture and Fisheries may determine.

" 3. The appointed members shall be such persons as may be selected

(1) For this Act see the preceding article and article on pages 97 to 71 of our issue for October 1917.

by the Board of Agriculture and Fisheries to act on the Wages Board, provided that at least one shall be a woman.

" 4. The selection and appointment of representative members shall, subject to the provisions of paragraph 5 of these regulations, be as follows :

" Of the members representing employers, eight shall be elected as follows :

2 representatives by the council of the Royal Agricultural Society of England.

2 representatives by the general executive committee of the National Farmers' Union.

2 representatives by the council of the Central and Associated Chambers of Agriculture.

2 representatives by the Welsh Agricultural Council.

" Eight members representing employers shall be nominated by the Board of Agriculture and Fisheries, after due consideration of any names which may be submitted by agricultural associations or otherwise, and after such local enquiries as the President of the Board may deem desirable.

" Of the members representing workmen six shall be elected by the executive committee of the National Agricultural Labourers' and Rural Workers' Union and two by the general executive committee of the Workers Union. Eight members representing workmen shall be nominated by the Board of Agriculture and Fisheries, after consultation with the Ministry of Labour, and after due consideration of any names submitted by workmen and their representative.

" 5. In the election and nomination of representative members, regard shall be had so far as practicable to securing on the Wages Board a fair representation of all classes of farming, and of the various conditions of employment in agriculture in all parts of the country. Where, as the result of any elections under the provisions of paragraph 4, such fair representation cannot, in the opinion of the Board of Agriculture and Fisheries, be secured on the Wages Board, the Board of Agriculture and Fisheries may, in addition to the persons nominated by them under paragraph 4, nominate a representative member in place of any person so elected.

" 6. The Board of Agriculture and Fisheries may, notwithstanding the provisions of paragraph 1, if they think it necessary to secure the proper representation of any classes of employers or workmen, after giving the Wages Board an opportunity to be heard, nominate additional representative members of the Wages Board to serve for such period, not exceeding three years, as may be determined by the Board of Agriculture and Fisheries. The number of such additional representative members shall always be an even number, not exceeding four in all, of whom half shall be representatives of employers and half shall be representatives of workmen.

" 7. Any member representing employers who becomes a workman in agriculture shall vacate his seat. Any member representing workmen who becomes an employer in agriculture shall vacate his seat. The question of fact shall in each case be determined by the Board of Agriculture and Fisheries.

" 8. Any representative member who, in the opinion of the Board of Agriculture and Fisheries, fails without reasonable cause to attend one half of the total number of meetings in a calendar year shall vacate his seat.

" 9. If in the opinion of the Board of Agriculture and Fisheries any representative member shall be incapable of acting as a member of the Wages Board, the Board of Agriculture and Fisheries may determine his appointment and he shall thereupon vacate his seat.

" 10. At the end of one year from the date of the establishment of the Wages Board five representative members to be chosen by lot from among the members representing employers and five representative members to be chosen by lot from among the members representing workmen (in each case excluding additional representative members nominated under paragraph 6 of these Regulations) shall retire from the Wages Board.

" 11. At the end of two years from the date of the establishment of the Wages Board five representative members to be chosen by lot from among the members representing employers and five representative members to be chosen by lot from among the members representing workmen (in each case excluding additional representative members nominated under paragraph 6 of these regulations and excluding members filling the vacancies created by the operation of paragraph 10) shall retire from the Wages Board.

" 12. The term of office of an appointed member shall be two years, and, subject to the provisions of paragraphs 6, 7, 8, 9, 10 and 11, the term of office of a representative member shall be three years, provided that —

(a) A member appointed to fill a casual vacancy shall sit only for the unexpired portion of the term of office of his predecessor ; and

(b) A seat rendered vacant by effluxion of time shall, in the event of delay occurring in filling it, be temporarily occupied by the retiring member until a successor is appointed.

" 13. Any person vacating his seat on the Wages Board under any of the preceding paragraphs or for any other reason otherwise than under paragraph 9 of these Regulations shall be eligible to be reappointed as a member of the Wages Board.

" 14. A vacancy among representatives members shall be filled in the same manner as in the case of the original appointment to the vacated seat.

" 15. Every member of the Wages Board shall have one vote. If at any meeting of the Board the number of members present representing employers and workmen, respectively, is unequal, it shall be open to the side which is in the majority to arrange that one or more of their members shall refrain from voting, so as to preserve equality. Failing such an arrangement, the Chairman, or, in his absence, the Deputy Chairman, may, if he thinks it desirable, adjourn the voting on any question to another meeting of the Board. The Chairman, or, in his absence, the Deputy Chairman shall, in the event of an equal division, have a second or casting vote.

" 16. The expressions "agriculture" and "workmen" in the regulations shall have the meanings given in the Corn Production, Act 1917 (1).

" 17. The Wages Board shall be known under the title of " The Agricultural Wages Board (England and Wales) ".

" 18. Any question upon the construction or interpretation of these Regulations shall in the event of dispute be referred to the Board of Agriculture and Fisheries for decision ".

RUSSIA.

FOOD CONTROL COMMITTEES. — *The Russian Constitution*, Vol. I, No. 10, London, September 1917.

The problem of the food supply is one of the heaviest legacies of the old regime to the revolutionary government of Russia. The provisional government was no sooner formed than it set itself to regulate the supply, transport and distribution of food and other primary necessities.

Some help was afforded by spontaneous action on the part of the people. In the early days of the revolution local conferences on the food question were convoked practically all over Russia, and the conferences formed local food boards. The composition both of conferences and of boards varied from place to place but as a rule their leading members were local co-operators. In many cases, even when a conference had not been summoned, the managing committees of local consumers' societies or of the unions of these were entrusted with the duties of food boards. Thus a nucleus existed for the organization which the central government called into being.

The Organization of the Committees. — The central government published its regulations as to this organization at the same time as it introduced the grain monopoly. These regulations set up all over the country a network of local food committees, of which the members are elected and represent all groups and classes of the population. The element of co-ordination is provided by the rule that the committees include representatives of the National Food Council, deputed by the latter, and also representatives of such other government departments as the War Office, the Home Office, and the Ministries of Railways, Finance, Trade and Agriculture. The Committees may co-opt experts but these can act only in a consultative capacity.

There are provincial, town and district committees. The members of the committee of a province are elected by the provincial zemstvo and municipalities, the councils of workmen's and soldiers' delegates, the local trade unions, local councils of the peasants' union, the co-operative societies and local agricultural societies, and the local trade organizations called committees of exchange. Of the thirty-five to forty members of a provincial committee only three represent trade, six represent the co-operative societies and from three to five the agricultural societies.

The town committees have a more or less similar composition but include also members elected by the employees of the municipalities.

The district committees include representatives of the employees of the district zemstvos. The rural district committees are composed en-

tirely of representatives of producers and consumers, being elected by the peasants, the working-class organizations, the co-operative societies and the local employees of the rural zemstvos.

Each committee elects its own chairman. The chairman of a provincial committee acts as local representative of the Ministry of Agriculture.

The Duties of the Committees. — The committees have the full local control of the food supply, and are charged to carry out the orders of the Central Council, acting through the Ministry of Agriculture, and to promote agricultural production and secure as far as possible a supply of the necessities of life within their respective areas.

In order to fulfil these duties a provincial committee may take a census of available food supplies, issue regulations for the delivery and storage of grain, requisition supplies, fix prices and regulate the distribution of food. A town or district committee acts on the instructions of a provincial committee and shares its functions. A rural district committee has the further right to take a census of the rural population, of the area under crops and of the available stock of cattle; and it must organize the collecting, receiving and forwarding of food supplies.

The committees appoint from among their members their own executives (*uprava*), saving that two members of the executive of each committee are appointed by the executive of the local authority. Co-ordination with the latter is thus secured.

The Part of Co-operative Societies. — According to special instructions issued by the Ministry of Agriculture, co-operative societies are preferred as purchasers of food, both for the army and for the civil population, to other organizations and to private persons. Co-operative credit unions are especially recommended as purchasers of food because they have considerable means of their own and a solid economic organization.

In practice the executives of food committees follow these recommendations. They use the capital of the credit unions to finance their purchases; they frequently entrust all their purchases to these unions; and they make extensive use of their warehouses for grain. They entrust the task of distributing the bought food among the population to the local consumers' societies.

In the province of Nijni-Novgorod, for instance, the local food committees have suffered the Nijni-Novgorod Union of Small Credit Institutions to buy and store food for them, and have made the same union responsible for supplying to the population tools and metal needed for the repair of agricultural machinery, for repairing such machinery in its own workshops, for buying it and for distributing it to the population. All this enterprise is financed entirely by the union, which places its stores and employees at the service of the food committees.

UNITED STATES.

FEDERAL FOOD CONTROL ACT.

This elaborate war measure was signed by President Wilson on 10 August. Its object is expressed in the opening section as "to assure an adequate

supply and equitable distribution, and to facilitate the movement of foods, feeds, fuel including fuel oil and natural gas, and fertilizer ingredients, tools, utensils, implements, machinery, and equipment required for the actual production of foods, feeds and fuel, hereafter in this Act called necessities; to prevent, locally or generally, scarcity, monopolization, hoarding, injurious speculation, manipulations, and private controls, affecting such supply, distribution, and movement; and to establish and maintain governmental control of such necessities during the war".

The Act confers greatly extended powers upon the president during the existence of a state of war and imposes drastic penalties for violation of its provisions. Many of these powers deal with the control and distribution of food as well as a number of other commodities. In administering the Act, the president is authorized to use any department or agency of the government, as well as to establish and work with other agencies. The enforcement of the provisions relating to the control and distribution of foods has been entrusted by him to a Food Administrator.

Among practices specifically prohibited in the Act are the wilful destruction of necessities for the purpose of enhancing price or restricting supply, any conspiring to restrict their production or manufacture for the same purposes, and the holding of or the attempt to monopolize necessities as defined in the Act. A system of licensing various operations is authorized when it is deemed essential, and the president in certain conditions may seize factories, packing-houses, or other plants and operate them. He may requisition food, fodder, fuel and other supplies needed by the army or navy, and may purchase, store, and sell to the public wheat, flour, meal, beans and potatoes, as well as procure nitrate of soda to sell at cost price if the emergency requires it and it is possible to secure the material. In an emergency requiring the stimulation of wheat production, he may fix a minimum guaranteed price. For the crop of 1918 this guarantee is made absolute until 1 May 1919, and is fixed at not less than \$ 2.00 per bushel for No. 1 northern spring wheat or its equivalent at the principal home markets.

The use of foods, fruits, food materials, or fodder for the production of distilled spirits as beverages is prohibited after 8 September 1917. The president is also empowered to restrict or prohibit the use of these materials for the production of malt or vinous liquors if this be deemed essential to the food supply or national security and defence.

An appropriation of \$ 152,500,000 is provided for the enforcement of the Act, with additional \$10,000,000 for the purchase of nitrate of soda.

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